

Associate of Arts & Sciences Degrees

Business Administration

General Studies

Specialization: African-American Studies

Specialization: Appalachian Studies

Specialization: Criminal Justice

Specialization: Gender Studies

Specialization: Human Services

Specialization: Information Technology

Specialization: Recreation, Parks, & Leisure Studies

Specialization: Visual Arts

Specialization: Teacher Education Preparation

Science

Associate of Arts and Sciences

degrees provide the first two years of instruction in major fields that prepare students for transfer to colleges and universities to complete baccalaureate degrees.

Associate of Applied Science

degrees provide two years of instruction to develop knowledge and skills leading to employment or career advancement in specialized fields. These degrees are not intended as transfer programs.

Graduation Requirements

In order to meet PHCC graduation requirements, all degree students must satisfactorily complete Virginia Community College System Core Competency testing standards. Core Competency testing is scheduled during a two-week assessment period twice each year, once in October and once in March. Please see your program advisor to determine the best time for you to complete the testing.

Associate of Applied Science Degrees

Administration of Justice

Business Technology

Major: Accounting

Major: Administrative Support Technology

Specialization: Medical Office

Major: Management

Specialization: E-Commerce

Specialization: Entrepreneurship/Small Business

Specialization: International Business

Education Assisting

Emergency Medical Services

Paramedic

General Engineering Technologies

Health Technology

Nursing

Industrial Electronics Technology

Information Systems Technology

Specialization: Accounting Information Systems

Specialization: Game Design and Development

Specialization: Internet Services

Legal Assisting

Technical Studies

Specialization: Agribusiness

Specialization: Motorsports Technology

Business Administration

Award: Associate of Arts & Sciences

Length: 4 Semesters

Purpose: The curriculum is designed for the student who plans to complete a baccalaureate degree program. The transfer institution's catalog and transfer guide are the best sources of information for planning a course of study. Final responsibility for transferability of courses rests with the student and the registrar of that institution.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Other Information: Students planning ahead for this curriculum will find it most helpful to have completed college preparatory curriculum courses in high school in areas such as English, mathematics (two units of algebra and one of plane geometry), laboratory science, social studies, and foreign language.

Transfer Information: The student should become familiar with the requirements of the major department in the college or university to which transfer is contemplated and also consult the assigned academic advisor before planning a program of study. In order to prepare for junior class standing at a four-year college or university, the student must complete a program that is comparable in length and course content to the first two years of the program at the four-year institution.

Counselors have transfer guides from many institutions to assist in selection of courses. Every institution has unique requirements, so the student should investigate the programs of each institution under consideration for transfer.

Students should be particularly careful to select electives that correspond to requirements of the transfer institution.

Curriculum Requirements: Students must successfully complete all of the requirements listed below to be awarded this degree.

Program Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Apply the principles of financial accounting and managerial accounting.
- Apply the principles of macroeconomics and microeconomics.

General Education Requirements (23 Credits):

CST	110	Introduction to Communication (3)
ENG	111-112	College Composition I-II (6)
HIS	121-122	United States History I-II (6)
[or HIS	101-102	History of Western Civilization I-II (6)]
MTH	163	Precalculus I (3)
MTH	271	Applied Calculus I (3)
Wellness (2)—		Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (37 Credits):

ACC	211-212	Principles of Accounting I-II (6)
ECO	201	Principles of Macroeconomics (3)
ECO	202	Principles of Microeconomics (3)
ITE	119	Information Literacy (3)
MTH	241	Statistics I (3)
SDV	108	College Survival Skills (1)
SDV	199	Supervised Study in Transfer Programs (1)

Transfer Laboratory Science (8 Credits)

Must complete a two semester sequence
Courses may be selected from the following (other combinations approved by Division Dean):

BIO	101-102	General Biology I-II (4)(4)
BIO	231-232	Human Anatomy and Physiology I-II (4)(4)
CHM	111-112	College Chemistry I-II (4)(4)
GOL	105-106	Physical Geology – Historical Geology (4)(4)
PHY	201- 202	General College Physics I-II (4)(4)
PHY	241- 242	University Physics I-II (4)(4)

Social Science Elective (3 Credits):

Courses may be selected from the following:

GEO	210	People & the Land: Introduction to Cultural Geography (3)
PLS	211	U.S. Government I (3)
PLS	212	U.S. Government II (3)
PSY	200	Principles of Psychology (3)
SOC	200	Principles of Sociology (3)
SOC	268	Social Problems (3)

Fine Arts Electives (3 Credits):

Selected from among transfer courses in art, literature, foreign language, music, philosophy, religion, or communication studies and theatre.

College Transfer Electives (3 credits):

Selected from transfer courses in business, information technology, science, mathematics, social sciences, the humanities, fine arts, and foreign language. MTH 242 (Statistics II) may be required at the transfer institution; check with the college or university for specific requirements. Other business courses which may be required at the transfer institution include BUS 100 (Intro. to Business) and/or BUS 241 (Business Law I); check with the college or university for specific requirements.

Minimum required for degree: 60 Credits

Sample Schedule

Business Administration

FIRST YEAR

Fall Semester

ENG 111	College Composition I	3
HIS 121	United States History I (or HIS 101)	3
MTH 163	Precalculus I	3
SDV 108	College Survival Skills	1
	Science with Laboratory Elective	<u>4</u>
		14

Spring Semester

ENG 112	College Composition II	3
HIS 122	United States History II (or HIS 102)	3
ITE 119	Information Literacy	3
MTH 271	Applied Calculus I	3
	Science with Laboratory Elective	<u>4</u>
		16

SECOND YEAR

Fall Semester

ACC 211	Principles of Accounting I	3
MTH 241	Statistics I	3
ECO 201	Principles of Macroeconomics	3
	College Transfer Elective	3
	Wellness Elective	2
	Fine Arts Elective	<u>3</u>
		17

Spring Semester

ACC 212	Principles of Accounting II	3
ECO 202	Principles of Microeconomics	3
CST 110	Introduction to Communication	3
SDV 199	Supervised Study in Transfer Programs	1
	Social Science Elective	<u>3</u>
		13

Total Semester Hours: 60

General Studies

Award: Associate of Arts and Sciences

Length: 4 Semesters

Purpose: The curriculum is designed for the student who plans to complete a baccalaureate degree program. Students often select the general studies program if they intend to transfer to a four-year institution but are uncertain what their major will be. The transfer institution's catalog and transfer guide are the best sources of information for planning a course of study. Final responsibility for transferability of courses rests with the student and the registrar of that institution. There are five different options for the student seeking a General Studies degree. In addition to the basic program of general studies, students may specialize in the visual arts, human services, teacher education preparation, or parks, recreation, and leisure studies. Contact the division dean or an advisor for additional information.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Other Information: Students planning ahead for this curriculum will find it most helpful to have completed college preparatory curriculum courses in high school in areas such as English, mathematics (two units of algebra and one of plane geometry), laboratory science, social studies, and foreign language.

Transfer Information: The student should become familiar with the requirements of the major department in the college or university to which transfer is contemplated and also consult the assigned academic advisor before planning a program of study. In order to prepare for junior class standing at a four-year college or university, the student must complete a program that is comparable in length and course content to the first two years of the program at the four-year institution.

Counselors have transfer guides from many institutions to assist in selection of courses. Every institution has unique requirements, so the student should investigate the programs of each institution under consideration for transfer.

Students should be particularly careful to select electives that correspond to requirements of the transfer institution.

Curriculum Requirements: Students must successfully complete all of the requirements as listed will be awarded this degree.

Program Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.

- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Demonstrate an appreciation for the arts.
- Describe the importance of a historical and cultural perspective in the global community.
- Demonstrate competency in at least two areas within the field of theatre. (Performing Arts Specialization)
- Demonstrate competency in a least two areas within the field of visual arts. (Visual Arts Specialization)

General Education Requirements (23 Credits):

ENG 111-112 College Composition I-II (6)

CST 110 Introduction to Communication (3)

HIS 121-122 United States History I-II (6)

[or HIS 101-102 *History of Western Civilization I-II* (6)]

Choose one of the following combinations to fulfill the Math requirement (choose based on the requirements of the transfer institution):

[a] MTH 163 Precalculus I (3)

and MTH 271 Applied Calculus I (3)

[b] MTH 151 Mathematics for the Liberal Arts I (3)

and MTH 152 Mathematics for the Liberal Arts II (3)

[c] MTH 163 Precalculus I (3)

and MTH 164 Precalculus II (3)

[d] MTH 175 Calculus of One Variable I (3)

and MTH 176 Calculus of One Variable II (3)

and MTH 177 Introductory Linear Algebra (2)

and MTH 178 Topics in Analytic Geometry (2)

[e] MTH 163 Precalculus I (3)

and MTH 241 Statistics I (3)

Wellness (2)— Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (37 Credits):

NOTE: To select courses, student should consult the catalog of the institution(s) to which transfer is anticipated in addition to these requirements:

ITE 119 Information Literacy (3)

SDV 108 College Survival Skills (1)

SDV 199 Supervised Study in Transfer Programs (1)

English (Literature Elective)(3 Credits) selected from:

ENG 241-242 Survey of American Literature I-II (3)(3)

ENG 243-244 Survey of English Literature I-II (3)(3)

ENG 251-252 Survey of World Literature I-II (3)(3)

ENG 253-254 Survey of African-American Literature I-II (3)(3)

Transfer Laboratory Science (8 Credits):

Must complete a two semester sequence

Courses may be selected from the following (other combinations approved by Division Dean):

BIO 101-102 General Biology I-II (4)(4)

BIO 231-232 Human Anatomy and Physiology I-II (4)(4)

CHM 111-112 College Chemistry I-II (4)(4)

GOL 105-106 Physical Geology – Historical Geology (4)(4)

PHY 201- 202 General College Physics I-II (4)(4)

PHY 241- 242 University Physics I-II (4)(4)

Social Science (6 Credits):

Courses may be selected from the following:

ECO	201	Principles of Macroeconomics (3)
ECO	202	Principles of Microeconomics (3)
GEO	210	People & the Land: Intro. to Cultural Geography (3)
PLS	211	U.S. Government I (3)
PLS	212	U.S. Government II (3)
PSY	200	Principles of Psychology (3)
SOC	200	Principles of Sociology (3)
SOC	268	Social Problems (3)

Specified Fine Arts Course (3 credits) selected from:

ART	101	Appreciation and History of Art I (3)
<i>[or ART 201 History of Art I (3)]</i>		
ART	102	Appreciation and History of Art II (3)
<i>[or ART 202 History of Art II (3)]</i>		
MUS	121	Music Appreciation I (3)
CST	130	Introduction to the Theatre (3)
<i>[or CST 231 History of the Theatre I (3)]</i>		

Fine Art Elective (3 credits):

Selected from ART 101 or 201, ART 102 or 202, ENG 241-242, ENG 243-244, ENG 251-252, ENG 253-254, CST 130, CST 231, MUS 121, PHI 101, PHI 220, REL 200, REL 210, REL 231

College Transfer Electives (9 credits):

Selected from transfer courses in business, information technology, science, mathematics, social sciences, the humanities, fine arts, physical education, and foreign language.

Minimum required for degree: 60 Credits**Sample Schedule**General Studies

Without Specialization

FIRST YEAR**Fall Semester**

ENG	111	College Composition I	3
HIS	121	United States History I <i>(or HIS 101)</i>	3
MTH	163	Precalculus I <i>(or other approved math requirement)</i>	3
SDV	108	College Survival Skills	1
Science with Laboratory			<u>4</u>
			14

Spring Semester

ENG	112	College Composition II	3
HIS	122	United States History II <i>(or HIS 102)</i>	3
MTH	271	Applied Calculus I <i>(or other approved math requirement)</i>	3
ITE	119	Information Literacy	3
Science with Laboratory			<u>4</u>
			16

SECOND YEAR**Fall Semester**

CST	110	Introduction to Communication	3
ENG	Lit.	Literature Elective	3
Wellness			2
Social Science			3
College Transfer Elective			3
Fine Arts Elective			<u>3</u>
			17

Spring Semester

Social Science			3
SDV	199	Supervised Study in Transfer Programs	1
College Transfer Electives			6
Specified Fine Arts			<u>3</u>
			13

Total Semester Hours: 60

General Studies

African American Studies Specialization

Award: Associate of Arts & Sciences

Length: 4 Semesters

General Education Requirements (23 Credits):

ENG 111-112	College Composition I-II (6)
CST 110	Introduction to Communication (3)
HIS 121-122	United States History I-II (6)
[or HIS 101-102]	<i>History of Western Civilization I-II (6)]</i>
ITE 119	Information Literacy (3)
MTH 151	Mathematics for Liberal Arts I (3)
Wellness (2)—	Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (37 Credits):

NOTE: To select courses, student should consult the catalog of the institution(s) to which transfer is anticipated in addition to these requirements:

SDV 108	College Survival Skills (1)
SDV 199	Supervised Study in Transfer Programs (1)

Laboratory Science Elective (8 Credits):

Must complete a two semester sequence
Courses may be selected from the following (other combinations approved by Division Dean):

BIO 101-102	General Biology I-II (4)(4)
BIO 231-232	Human Anatomy and Physiology I-II (4)(4)
CHM 111-112	College Chemistry I-II (4)(4)
GOL 105-106	Physical Geology – Historical Geology (4)(4)
PHY 201- 202	General College Physics I-II (4)(4)
PHY 241- 242	University Physics I-II (4)(4)

Social Science Elective (6 Credits): Select from:

ECO 201	Principles of Macroeconomics (3)
ECO 202	Principles of Microeconomics (3)
GEO 210	People & tLand: Intro. To Cultural Geography (3)
PLS 211	U.S. Government I (3)
PLS 212	U.S. Government II (3)
PSY 200	Principles of Psychology (3)
PSY 230	Developmental Psychology (3)
SOC 200	Principles to Sociology (3)

Humanities Elective (6 credits): Select from:

ART 101	Appreciation and History of Art I (3)
[or ART 201]	<i>History of Art I (3)]</i>
ART 102	Appreciation and History of Art II (3)
[or ART 202]	<i>History of Art II (3)]</i>
CST 130	Introduction to the Theatre (3)
[or CST 231]	<i>History of the Theatre I (3)]</i>
ENG 241-242	Survey of American Literature I-II (3)(3)
ENG 243-244	Survey of English Literature I-II (3)(3)
ENG 251-252	Survey of World Literature I-II (3)(3)
FRE 101-102	Beginning French I-II (4)(4)
MUS 121	Music Appreciation I (3)
PHI 101	Introduction to Philosophy I (3)
PHI 220	Ethics (3)
REL 200	Survey of the Old Testament (3)
REL 210	Survey of the New Testament (3)
REL 231	Religions of the World I (3)
SPA 101-102	Beginning Spanish I-II (4)(4)

African American Studies Electives (9 credits):

Select from the following:	
ENG 253	Survey of African-American Literature I (3)
ENG 254	Survey of African-American Literature II (3)
HIS 141	African-American History I (3)
HIS 142	African-American History II (3)
HUM 220	Introduction to African-American Studies (3)
PSY 219	Cross-Cultural Psychology (3)

SOC 295	Crime in the African-American Community (3)
SOC 266	Race and Ethnicity (3)
SOC 252	Sociology Through Visual Media (3)

Transfer Electives (6 credits)

Minimum required for degree: 60 Credits

Sample Schedule

African American Studies

FIRST YEAR

Fall Semester

ENG 111	College Composition I	3
HIS 121	United States History I (or HIS 101)	3
ITE 119	Information Literacy	3
SDV 108	College Survival Skills	1
Science with Laboratory		<u>4</u>
		14

Spring Semester

ENG 112	College Composition II	3
HIS 122	United States History II (or HIS 102)	3
African American Studies Elective		3
Science with Laboratory		4
Transfer Elective		<u>3</u>
		16

SECOND YEAR

Fall Semester

CST 110	Introduction to Communication	3
MTH 151	Math for Liberal Arts I (or other approved math requirement)	3
African American Studies Elective		3
Humanities Elective		3
Social Science Elective		3
Wellness		<u>2</u>
		17

Spring Semester

SDV 199	Supervised Study in Transfer Programs	1
African American Studies Elective		3
Humanities Elective		3
Social Science Elective		3
Transfer Elective		<u>3</u>
		13

Total Semester Hours: 60

General Studies

Appalachian Studies Specialization

Award: Associate of Arts & Sciences

Length: 4 Semesters

General Education Requirements (23 Credits):

ENG 111-112	College Composition I-II (6)
CST 110	Introduction to Communication (3)
HIS 121-122	United States History I-II (6)
[or HIS 101-102]	<i>History of Western Civilization I-II (6)]</i>
ITE 119	Information Literacy (3)
MTH 151	Mathematics for Liberal Arts I (3)
Wellness (2)—	Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (37 Credits):

NOTE: To select courses, student should consult the catalog of the institution(s) to which transfer is anticipated in addition to these requirements:

SDV 108	College Survival Skills (1)
SDV 199	Supervised Study in Transfer Programs (1)

Laboratory Science Elective (8 Credits):

Must complete a two semester sequence
Courses may be selected from the following (other combinations approved by Division Dean):

BIO 101-102	General Biology I-II (4)(4)
BIO 231- 232	Human Anatomy and Physiology I-II (4)(4)
CHM 111- 112	College Chemistry I-II (4)(4)
GOL 105- 106	Physical Geology – Historical Geology (4)(4)
PHY 201- 202	General College Physics I-II (4)(4)
PHY 241- 242	University Physics I-II (4)(4)

Social Science Elective (6 Credits): Select from:

ECO 201	Principles of Macroeconomics (3)
ECO 202	Principles of Microeconomics (3)
GEO 210	People & Land: Intro. Cultural Geography (3)
PLS 211	U.S. Government I (3)
PLS 212	U.S. Government II (3)
PSY 200	Principles of Psychology (3)
PSY 230	Developmental Psychology (3)
SOC 200	Principles to Sociology (3)

Humanities Elective (6 credits): Select from:

ART 101	Appreciation and History of Art I (3)
[or ART 201]	<i>History of Art I (3)]</i>
ART 102	Appreciation and History of Art II (3)
[or ART 202]	<i>History of Art II (3)]</i>
CST 130	Introduction to the Theatre (3)
[or CST 231]	<i>History of the Theatre I (3)]</i>
ENG 241-242	Survey of American Literature I-II (3)(3)
ENG 243-244	Survey of English Literature I-II (3)(3)
ENG 251-252	Survey of World Literature I-II (3)(3)
FRE 101-102	Beginning French I-II (4)(4)
MUS 121	Music Appreciation I (3)
PHI 101	Introduction to Philosophy I (3)
PHI 220	Ethics (3)
REL 200	Survey of the Old Testament (3)
REL 210	Survey of the New Testament (3)
REL 231	Religions of the World I (3)
SPA 101-102	Beginning Spanish I-II (4)(4)

Appalachian Studies Electives (9 credits):

Select from the following:

ENG 278	Appalachian Literature (3)
ENG 288	Appalachian Folklore (3)
HUM 153	Introduction to Appalachian Studies (3)

MUS 218	Traditional Music and Musicians of Central Appalachia (3)
GEO 210	People and Land: Intro to Cultural Geography (3)
SOC 205	Rural Sociology (3)
HIS 295	Special Topics in Appalachian Studies (3)
PSY 219	Cross-Cultural Psychology (3)

Transfer Electives (6 credits)

Minimum required for degree: 60 Credits

Sample Schedule

Appalachian Studies

FIRST YEAR

Fall Semester

ENG 111	College Composition I	3
HIS 121	United States History I (or HIS 101)	3
ITE 119	Information Literacy	3
SDV 108	College Survival Skills Science with Laboratory	1 <u>4</u>
		14

Spring Semester

ENG 112	College Composition II	3
HIS 122	United States History II (or HIS 102)	3
	Appalachian Studies Elective	3
	Science with Laboratory	4
	Transfer Elective	<u>3</u>
		16

SECOND YEAR

Fall Semester

CST 110	Introduction to Communication	3
MTH 151	Math for Liberal Arts I (or other approved math requirement)	3
	Appalachian Studies Elective	3
	Humanities Elective	3
	Social Science Elective	3
	Wellness	<u>2</u>
		17

Spring Semester

SDV 199	Supervised Study in Transfer Programs	1
	Appalachian Studies Elective	3
	Humanities Elective	3
	Social Science Elective	3
	Transfer Elective	<u>3</u>
		13

Total Semester Hours: 60

General Studies

Criminal Justice Specialization

Award: Associate of Arts & Sciences

Length: 4 Semesters

General Education Requirements (20 Credits):

ENG 111-112 College Composition I-II (6)
CST 110 Introduction to Communication (3)
HIS 121-122 United States History I-II (6)
[or HIS 101-102 History of Western Civilization I-II (6)]
MTH 241 Statistics I (3)
Wellness (2)— Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (41 Credits):

NOTE: To select courses, student should consult the catalog of the institution(s) to which transfer is anticipated in addition to these requirements:

ITE 119 Information Literacy (3)
SDV 108 College Survival Skills (1)
SDV 199 Supervised Study in Transfer Programs (1)

Transfer Laboratory Science (8 Credits):

Must complete a two semester sequence:

BIO 101-102 General Biology I-II (4)(4)
CHM 111-112 College Chemistry I-II (4)(4)
GOL 105-106 Physical Geology – Historical Geology (4)(4)
PHY 201-202 General College Physics I-II (4)(4)

Social Science Elective (3 Credits): Select from:

ECO 201 Principles of Macroeconomics (3)
ECO 202 Principles of Microeconomics (3)
GEO 210 People & Land: Intro. to Cultural Geography (3)
PLS 211 U.S. Government I (3)
PSY 200 Principles of Psychology (3)
SOC 200 Principles of Sociology (3)
SOC 268 Social Problems (3)

Foreign Language (8 Credits): Select from:

SPA 101-102 Beginning Spanish I-II (4)(4)
FRE 101-102 Beginning French I-II (4)(4)

Humanities (3 credits):

REL 231 Religions of the World I (3)

Humanities Elective (3 credits): Select from:

ART 101-102 Appreciation and History of Art I (3)(3)
CST 130 Introduction to the Theatre (3)
CST 231 History of the Theatre I (3)
ENG 241-242 Survey of American Literature I (3)(3)
ENG 243-244 Survey of English Literature I (3)(3)
ENG 251-252 Survey of World Literature I (3)(3)
ENG 253-254 Survey of African-American Literature I (3)(3)
MUS 121 Music Appreciation I (3)
PHI 101 Introduction to Philosophy I (3)
PHI 220 Ethics (3)
REL 200 Survey of the Old Testament (3)
REL 210 Survey of the New Testament (3)
REL 231 Religions of the World I (3)

English (Literature Elective)(3 Credits)—selected from:

ENG 241-242 Survey of American Literature I (3)(3)
ENG 243-244 Survey of English Literature I (3)(3)

ENG 251-252 Survey of World Literature I (3)(3)
ENG 253-254 Survey of African-American Literature I (3)(3)

Criminal Justice Electives (9) Select from:

ADJ 100 Survey of Criminal Justice (3)
ADJ 105 The Juvenile Justice System (3)
ADJ 145 Corrections and the Community (3)
ADJ 146 Adult Correctional Institutions (3)
[or ADJ 140 Introduction to Corrections (3)]
ADJ 201 Criminology (3)

Minimum required for degree: 60 Credits

Sample Schedule

Criminal Justice

FIRST YEAR

Fall Semester

ENG 111	College Composition	3
HIS 121	United States History I (or HIS 101)	3
SDV 108	College Survival Skills	1
ADJ 100	Survey of Criminal Justice	3
	Transfer Lab Science	4
	Wellness	<u>1</u>
		15

Spring Semester

ENG 112	College Composition II	3
HIS 122	United States History II (or HIS 102)	3
CST 110	Introduction to Communications	3
	Social Science Elective	3
	Transfer Lab Science	<u>4</u>
		16

SECOND YEAR

Fall Semester

ITE 119	Information Literacy	3
REL 231	Religions of the World I	3
	Humanities Elective	3
	Wellness	1
	Foreign Language Elective	4
MTH 241	Statistics	<u>3</u>
		17

Spring Semester

SDV 199	Supervised Study in Transfer Programs	1
	Foreign Language Elective	4
	Humanities Elective	3
	Criminal Justice Elective	3
	English (Literature Elective)	<u>3</u>
		14

Total Semester Hours: 62

General Studies

Gender Studies Specialization

Award: Associate of Arts & Sciences

Length: 4 Semesters

General Education Requirements (23 Credits):

ENG 111-112 College Composition I-II (3)(3)
CST 110 Introduction to Communication (3)
HIS 121-122 United States History I-II (3)(3)
[or HIS 101-102 *History of Western Civilization I-II (3)(3)*]
ITE 119 Information Literacy (3)
MTH 151 Mathematics for Liberal Arts I (3)
Wellness (2)— Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (37 Credits):

NOTE: To select courses, student should consult the catalog of the institution(s) to which transfer is anticipated in addition to these requirements:

SDV 108 College Survival Skills (1)
SDV 199 Supervised Study in Transfer Programs (1)

Laboratory Science Elective (8 Credits):

Must complete a two semester sequence
Courses may be selected from the following (other combinations approved by Division Dean):

BIO 101-102 General Biology I-II (4)(4)
BIO 231-232 Human Anatomy and Physiology I-II (4)(4)
CHM 111-112 College Chemistry I-II (4)(4)
GOL 105-106 Physical Geology – Historical Geology (4)(4)
PHY 201-202 General College Physics I-II (4)(4)
PHY 241- 242 University Physics I-II (4)(4)

Social Science Elective (6 Credits): Select from:

ECO 201 Principles of Macroeconomics (3)
ECO 202 Principles of Microeconomics (3)
GEO 210 People & Land: Intro. To Cultural Geography (3)
PLS 211 U.S. Government I (3)
PLS 212 U.S. Government II (3)
PSY 200 Principles of Psychology (3)
PSY 230 Developmental Psychology (3)
SOC 200 Principles to Sociology (3)

Humanities Elective (6 credits): Select from:

ART 101 Appreciation and History of Art I (3)
[or ART 201 *History of Art I (3)*]
ART 102 Appreciation and History of Art II (3)
[or ART 202 *History of Art II (3)*]
CST 130 Introduction to the Theatre (3)
[or CST 231 *History of the Theatre I (3)*]
ENG 241-242 Survey of American Literature I-II (3)(3)
ENG 243-244 Survey of English Literature I-II (3)(3)
ENG 251-252 Survey of World Literature I-II (3)(3)
ENG 253-254 Survey of African-American Literature I-II (3)(3)
FRE 101-102 Beginning French I-II (4)(4)
MUS 121 Music Appreciation I (3)
PHI 101 Introduction to Philosophy I (3)
PHI 220 Ethics (3)
REL 200 Survey of the Old Testament (3)
REL 210 Survey of the New Testament (3)
REL 231 Religions of the World I (3)
SPA 101-102 Beginning Spanish I-II (4)(4)

Gender Studies Electives (9 credits):

Select from the following:

ENG 273 Women in Literature I (3)
ENG 274 Women in Literature II (3)
HIS 127 Women in American History (3)
HLT 204 Women's Health (3)

HUM 210 Introduction to Women in Humanities (3)
PHI 276 Women and Western Philosophy (3)
PSY 219 Cross-Cultural Psychology (3)
PSY 265 Psychology of Men and Women (3)
SOC 225 Sociology of Gender (3)
SSC 210 Introduction to Women's Studies (3)

Transfer Electives (6 credits)

Minimum required for degree: 60 Credits

Sample Schedule

Gender Studies

FIRST YEAR

Fall Semester

ENG 111	College Composition I	3
HIS 121	United States History I (or HIS 101)	3
ITE 119	Information Literacy	3
SDV 108	College Survival Skills	1
	Science with Laboratory	<u>4</u>
		14

Spring Semester

ENG 112	College Composition II	3
HIS 122	United States History II (or HIS 102)	3
	Gender Studies Elective	3
	Science with Laboratory	4
	Transfer Elective	<u>3</u>
		16

SECOND YEAR

Fall Semester

CST 110	Introduction to Communication	3
MTH 151	Math for Liberal Arts I (or other approved math requirement)	3
	Gender Studies Elective	3
	Humanities Elective	3
	Social Science Elective	3
	Wellness	<u>2</u>
		17

Spring Semester

SDV 199	Supervised Study in Transfer Programs	1
	Gender Studies Elective	3
	Humanities Elective	3
	Social Science Elective	3
	Transfer Elective	<u>3</u>
		13

Total Semester Hours: 60

General Studies

Human Services Specialization

Award: Associate of Arts & Sciences

Length: 4 Semesters

General Education Requirements (20 Credits):

ENG 111-112 College Composition I-II (6)
CST 110 Introduction to Communication (3)
HIS 121-122 United States History I-II (3)(3)
[or HIS 101-102 History of Western Civilization I-II (3)(3)]
MTH 152 Mathematics for Liberal Arts II (3)
Wellness (2)— Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (40 Credits):

NOTE: To select courses, student should consult the catalog of the institution(s) to which transfer is anticipated in addition to these requirements:

ITE 119 Information Literacy (3)
SDV 108 College Survival Skills (1)
SDV 199 Supervised Study in Transfer Programs (1)

Transfer Laboratory Science (8 Credits):

Must complete a two semester sequence

Courses may be selected from the following:

BIO 101-102 General Biology I-II (4)(4)
BIO 231-232 Human Anatomy and Physiology I-II(4)(4)

Social Science (6 Credits):

PSY 200 Principles of Psychology (3)
SOC 200 Principles to Sociology (3)

Humanities Elective (6 credits):

Select from:
ART 101 Appreciation and History of Art I (3)
[or ART 201 History of Art I (3)]
ART 102 Appreciation and History of Art II (3)
[or ART 202 History of Art II (3)]
CST 130 Introduction to the Theatre (3)
[or CST 231 History of the Theatre I (3)]
ENG 241-242 Survey of American Literature I-II (3)(3)
ENG 243-244 Survey of English Literature I-II (3)(3)
ENG 251-252 Survey of World Literature I-II (3)(3)
ENG 253-254 Survey of African-American Literature I-II (3)(3)
MUS 121 Music Appreciation I (3)
PHI 101 Introduction to Philosophy I (3)
PHI 220 Ethics (3)
REL 200 Survey of the Old Testament (3)
REL 210 Survey of the New Testament (3)
REL 231 Religions of the World I (3)
SPA 101-102 Beginning Spanish I-II (4)(4)

Human Services (15 credits):

HMS 100 Introduction to Human Services (3)
HMS 162 Communication Skills for Human Services Professionals (3)
HMS 195 Introduction to Developmental Disabilities (3)

HMS EEE Approved HMS Electives (6) Select from:

PSY 216 Social Psychology (3)
PSY 230 Developmental Psychology (3)
SOC 215 Sociology of the Family (3)
SOC 268 Social Problems (3)
SOC 226 Human Sexuality (3)
HMS 251 Substance Abuse I (3)
PSY 215 Abnormal Psychology (3)
HMS 290 Coordinated Internship in Human (3)

Minimum required for degree: 60 Credits

Sample Schedule

Human Services

FIRST YEAR

Fall Semester

ENG 111	College Composition I	3
HIS 121	United States History I (or HIS 101)	3
SDV 108	College Survival Skills	1
HMS 100	Introduction to Human Services Science with Laboratory	3 4
		14

Spring Semester

ENG 112	College Composition II	3
HIS 122	United States History II (or HIS 102)	3
HMS 162	Communication Skills for Human Services Professionals	3
PSY 200	Principles of Psychology I Science with Laboratory	3 4
		16

SECOND YEAR

Fall Semester

CST 110	Introduction to Communication	3
HMS 195	Introduction to Developmental Disabilities	3
HMS EEE	Approved HMS Elective	3
	Humanities Elective	3
SOC 200	Principles of Sociology	3
	Wellness	1
		16

Spring Semester

HMS EEE	Approved Human Services Elective	3
ITE 119	Information Literacy	3
	Humanities Elective	3
MTH 152	Math for Liberal Arts II (or other approved math requirement)	3
SDV 199	Supervised Study in Transfer Programs	1
	Wellness	1
		14

Total Semester Hours: 60

General Studies

Information Technology Specialization

Award: Associate of Arts and Sciences

Length: 4 Semesters

General Education Requirements (22 Credits):

ENG 111-112 College Composition I-II (6)

CST 110 Introduction to Communication (3)

HIS 121-122 United States History I-II (6)

[or HIS 101-102 History of Western Civilization I-II (6)]

Choose one of the following combinations to fulfill the Math requirement (choose based on the requirements of the transfer institution):

[a] MTH 163 Precalculus I (3)

and MTH 271 Applied Calculus I (3)

[b] MTH 151 Mathematics for the Liberal Arts I (3)

and MTH 152 Mathematics for the Liberal Arts II (3)

[c] MTH 163 Precalculus I (3)

and MTH 164 Precalculus II (3)

[d] MTH 175 Calculus of One Variable I (3)

and MTH 176 Calculus of One Variable II (3)

and MTH 177 Introductory Linear Algebra (2)

and MTH 178 Topics in Analytic Geometry (2)

[e] MTH 163 Precalculus I (3)

and MTH 241 Statistics I (3)

Wellness (1)— Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (39 Credits):

NOTE: To select courses, student should consult the catalog of the institution(s) to which transfer is anticipated in addition to these requirements:

SDV 108 College Survival Skills (1)

SDV 199 Supervised Study in Transfer Programs (1)

Transfer Laboratory Science (8 Credits):

Must complete a two semester sequence

Courses may be selected from the following (other combinations approved by Division Dean):

BIO 101- 102 General Biology I-II (4)(4)

BIO 231-232 Human Anatomy and Physiology I-II (4)(4)

CHM 111- 112 College Chemistry I-II (4)(4)

GOL 105- 106 Physical Geology – Historical Geology (4)(4)

PHY 201-202 General College Physics I-I (4)(4)

PHY 241- 242 University Physics I-II (4)(4)

Social Science Electives (6 Credits):

Courses may be selected from the following:

ECO 201 Principles of Macroeconomics (3)

ECO 202 Principles of Microeconomics (3)

GEO 210 People & Land: Intro. to Cultural Geography (3)

PLS 211 U.S. Government I (3)

PLS 212 U.S. Government II (3)

PSY 200 Principles of Psychology (3)

SOC 200 Principles of Sociology (3)

SOC 268 Social Problems (3)

Fine Arts Elective (3 credits):

Selected from college transfer courses in art, communication studies, foreign language, literature, music, philosophy, religion and theatre.

Information Systems Electives (14 credits):

Selected from transfer courses in information technology and business, including CSC 200 (3), CSC 201 (4), CSC 202 (4), CSC 205 (3), ITP 120 (Java I) (4), ITP 220 (Java II) (4).

College Transfer Electives (6 Credits)

Selected from transfer courses in business, engineering, fine arts, the humanities, information technology, mathematics, physical education, science and social sciences.

Minimum required for degree: 61 Credits

Sample Schedule

Information Technology Specialization

FIRST YEAR

Fall Semester

ENG 111	College Composition I	3
MATH	(from approved math requirement list)	3
SDV 108	College Survival Skills	1
CSC 200	Introduction to Computer Science	3
CSC 201	Computer Science I	4
Wellness		<u>1</u>
		15

Spring Semester

ENG 112	College Composition II	3
CST 110	Introduction to Communication	3
MATH	(from approved math requirement list)	3
CSC 202	Computer Science II	4
College Transfer Elective		<u>3</u>
		16

SECOND YEAR

Fall Semester

HIS 121	United States History I (or HIS 101)	3
Social Science		3
Science with Laboratory		4
CSC 205	Computer Organization	3
Fine Arts Elective		<u>3</u>
		16

Spring Semester

HIS 122	United States History II (or HIS 102)	3
Social Science		3
SDV 199	Supervised Study in Transfer Programs	1
Science with Laboratory		4
College Transfer Elective		<u>3</u>
		14

Total Semester Hours: 61

General Studies

Recreation, Parks, and Leisure Studies Specialization

Award: Associate of Arts & Sciences

Length: 4 Semesters

General Education Requirements (23 Credits):

ENG 111-112 College Composition I-II (6)
CST 110 Introduction to Communication (3)
HIS 121-122 United States History I-II (6)
[or HIS 101-102 History of Western Civilization I-II (6)]
ITE 119 Information Literacy (3)
MTH 151 Mathematics for Liberal Arts I (3)
Wellness (2)— Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (37 Credits):

NOTE: To select courses, student should consult the catalog of the institution(s) to which transfer is anticipated in addition to these requirements:

SDV 108 College Survival Skills (1)
SDV 199 Supervised Study in Transfer Programs (1)

Laboratory Science Elective (8 Credits):

Must complete a two semester sequence
Courses may be selected from the following (other combinations approved by Division Dean):

BIO 101-102 General Biology I-II (4)(4)
BIO 231-232 Human Anatomy and Physiology I-II (4)(4)
CHM 111-112 College Chemistry I-II (4)(4)
GOL 105-106 Physical Geology – Historical Geology (4)(4)
PHY 201-202 General College Physics I-II (4)(4)
PHY 241-242 University Physics I-II (4)(4)

Social Science Elective (6 Credits): Select from:

ECO 201 Principles of Macroeconomics (3)
ECO 202 Principles of Microeconomics (3)
GEO 210 People & the Land: Intro. Cultural Geography (3)
PLS 211 U.S. Government I (3)
PLS 212 U.S. Government II (3)
PSY 200 Principles of Psychology (3)
PSY 230 Developmental Psychology (3)
SOC 200 Principles to Sociology (3)

Humanities Electives (6 credits): Select from:

ART 101 Appreciation and History of Art I (3)
[or ART 201 History of Art I (3)]
ART 102 Appreciation and History of Art II (3)
[or ART 202 History of Art II (3)]
CST 130 Introduction to the Theatre (3)
[or CST 231 History of the Theatre I (3)]
ENG 241-242 Survey of American Literature I-II (3)(3)
ENG 243-244 Survey of English Literature I-II (3)(3)
ENG 251-252 Survey of World Literature I-II (3)(3)
ENG 253-254 Survey of African-American Literature I-II (3)(3)
FRE 101-102 Beginning French I-II (4)(4)
MUS 121 Music Appreciation I (3)

PHI 101 Introduction to Philosophy I (3)
PHI 220 Ethics (3)
REL 200 Survey of the Old Testament (3)
REL 210 Survey of the New Testament (3)
REL 231 Religions of the World I (3)
SPA 101-102 Beginning Spanish I-II (4)(4)

Recreation, Parks, and Leisure Studies (15 credits):

PED 210 Introduction to Physical Education and Health (3)
RPK 100 Introduction to Recreation, Parks, and Leisure Studies (3)
RPK 201 Recreation and Parks Management (3)
RPK 210 Principles and Psychology of Coaching (3)
RPK 265 Risk Management (3)

Minimum required for degree: 60 Credits

Sample Schedule

Recreation, Parks, & Leisure Studies

FIRST YEAR

Fall Semester

ENG 111 College Composition I 3
HIS 121 United States History I *(or HIS 101)* 3
PED 210 Introduction to Physical Education & Health 3
SDV 108 College Survival Skills 1
Science with Laboratory 4
14

Spring Semester

ENG 112 College Composition II 3
HIS 122 United States History II *(or HIS 102)* 3
ITE 119 Information Literacy 3
RPK 100 Intro. to Recreation, Parks, & Leisure Studies 3
Science with Laboratory 4
16

SECOND YEAR

Fall Semester

CST 110 Introduction to Communication 3
Humanities Elective 3
MTH 151 Math for Liberal Arts I 3
(or other approved math requirement)
RPK 201 Recreation & Parks Management 3
Social Science Elective 3
Wellness 2
17

Spring Semester

Humanities Elective 3
RPK 210 Principles & Psychology of Coaching 3
RPK 265 Risk Management 3
SDV 199 Supervised Study in Transfer Programs 1
Social Science Elective 3
13

Total Semester Hours: 60

General Studies

Visual Arts Specialization

Award: Associate of Arts & Sciences

Length: 4 Semesters

General Education Requirements (23 Credits):

ENG 111-112 College Composition I-II (6)

HIS 121-122 United States History I-II (6)

[or HIS 101-102 *History of Western Civilization I-II (6)*]

Choose one of the following combinations to fulfill the Math requirement based on requirements of the transfer institution:

[a] MTH 163 Precalculus I (3)

and MTH 271 Applied Calculus I (3)

[b] MTH 151 Mathematics for the Liberal Arts I (3)

and MTH 152 Mathematics for the Liberal Arts II (3)

[c] MTH 163 Precalculus I (3)

and MTH 164 Precalculus II (3)

[d] MTH 175 Calculus of One Variable I (3)

and MTH 176 Calculus of One Variable II (3)

and MTH 177 Introductory Linear Algebra (2)

and MTH 178 Topics in Analytic Geometry (2)

[e] MTH 163 Precalculus I (3)

and MTH 241 Statistics I (3)

CST 110 Introduction to Communication (3)

Wellness (2)— Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (37 Credits):

ITE 119 Information Literacy (3)

SDV 108 College Survival Skills (1)

SDV 199 Supervised Study in Transfer Programs (1)

ART Electives (15): Select from:

ART 101 Appreciation and History of Art I (3)

ART 102 Appreciation and History of Art II (3)

ART 121 Drawing I (3)

ART 122 Drawing II (3)

ART 151 Theory and Practice of Ceramics I (3)

ART 201 Art History I (3)

ART 202 Art History II (3)

ART 241 Painting I (3)

ART 242 Painting II (3)

English (Literature Elective)(3 Credits)—selected from:

ENG 241-242 Survey of American Literature I-II (3)(3)

ENG 243-244 Survey of English Literature I-II (3)(3)

ENG 251-252 Survey of World Literature I-II (3)(3)

ENG 253-254 Survey of African-American Literature I-II (3)(3)

Transfer Laboratory Science (8 Credits):

Must complete a two semester sequence

Social Science (6 Credits):

Courses may be selected from the following:

ECO 201 Principles of Macroeconomics (3)

ECO 202 Principles of Microeconomics (3)

GEO 210 People & the Land: Intro. to Cult. Geog. (3)

PLS 211 U.S. Government I (3)

PLS 212 U.S. Government II (3)

PSY 200 Principles of Psychology (3)

PSY 201 Introduction to Psychology I (3)

PSY 202 Introduction to Psychology II (3)

SOC 200 Principles of Sociology (3)

SOC 201 Introduction to Sociology I (3)

SOC 202 Introduction to Sociology II (3)

Electives (3 Credits)

Minimum required for degree: 60 Credits

Sample Schedule

Visual Arts

FIRST YEAR

Fall Semester

Art Program Elective	3
ENG 111 College Composition I	3
HIS 121 United States History I (or HIS 101)	3
SDV 108 College Survival Skills Science with Laboratory	1 <u>4</u>
	14

Spring Semester

Art Program Elective	3
ENG 112 College Composition II	3
HIS 122 United States History II (or HIS 102)	3
ITE 119 Information Literacy Science with Laboratory	3 <u>4</u>
	16

SECOND YEAR

Fall Semester

Art Program Elective	3
Art Program Elective	3
ENG . Literature Elective	3
Wellness	2
Social Science	3
MTH 163 Precalculus I (or other approved math requirement)	<u>3</u>
	17

Spring Semester

Art Program Elective	3
Social Science	3
MTH 271 Applied Calculus I (or other approved math requirement)	3
CST 110 Introduction to Communication	3
SDV 199 Supervised Study in Transfer Programs	<u>1</u>
	13

Total Semester Hours: 60

General Studies

Teacher Education Preparation Specialization

Award: Associate of Arts & Sciences

Length: 4 Semesters

Purpose: The curriculum is designed to prepare the student who plans to complete a baccalaureate degree program in early childhood education, elementary education, middle education, or special education. The transfer institution's catalog and transfer guide are the best sources of information for planning a course of study. Final responsibility for transferability of courses rests with the student and the registrar of that institution. This program is part of an agreement between the Virginia Community College System and various public and private four-year institutions in the Commonwealth of Virginia and is intended to facilitate entry into a teacher preparation program. Specifically, the following baccalaureate programs are targeted:

Early Childhood [Pre-K through 3rd grade]

Elementary [Pre-K through 6th grade]

Middle Education [6th through 8th grade]

Special Education

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Other Information: Students planning ahead for this curriculum will find it most helpful to have completed college preparatory curriculum courses in high school in areas such as English, mathematics (two units of algebra and one of plane geometry), laboratory science, social studies, and foreign language. Scholarship money is available through the Tobacco Commission. Students entering this program should contact the Financial Aid office for complete information regarding scholarships.

Transfer Information: The student should become familiar with the requirements of the major department in the college or university to which transfer is contemplated and also consult the assigned academic advisor before planning a program of study. In order to prepare for junior class standing at a four-year college or university, the student must complete a program that is comparable in length and course content to the first two years of the program at the four-year institution. Students completing this curriculum are required to pass the PRAXIS I examination.

Counselors have transfer guides from many institutions to assist in selection of courses. Every institution has unique requirements, so the student should investigate the programs of each institution under consideration for transfer.

Students should be particularly careful to select electives that correspond to requirements of the transfer institution. Students are required to pass PRAXIS I.

Curriculum Requirements: Students must successfully complete all of the requirements listed below to be awarded this degree.

Program Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Demonstrate an appreciation for the arts.
- Describe the importance of a historical and cultural perspective in the global community.
- Describe the current status of teaching and education as a profession and the required path needed for teacher licensure in Virginia.

General Education Requirements (29 Credits):

ENG 111	College Composition I (3)
ENG 112	College Composition II (3)
ENG 241	Survey of American Literature I (3)
[or ENG 242	Survey of American Literature II (3)
or ENG 243	Survey of English Literature I (3)
or ENG 244	Survey of English Literature II (3)
or ENG 251	Survey of World Literature I (3)
or ENG 252	Survey of World Literature II (3)]
HIS 121	United States History I (3)
HIS 122	United States History II (3)
HIS 101	History of Western Civilization I (3)
[or HIS 102	History of Western Civilization II (3)]

Choose one of the following combinations [a or b] to fulfill the Math requirement (choose based on the requirements of the transfer institution):

[a] MTH 163	Precalculus I (3)
and MTH 241	Statistics I (3)
[b] MTH 151	Mathematics for the Liberal Arts I (3)
and MTH 152	Mathematics for the Liberal Arts II (3)
CST 110	Introduction to Communication (3)
Wellness (2)—	Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (31 Credits):

EDU 200	Introduction to Teaching as a Profession (3)
GEO 210	People and Land: Intro to Cultural Geography (3)
ITE 119	Information Literacy (3)
SDV 101	Orientation to Education (1)
or SDV 108	College Survival Skills (1)
SDV 199	Supervised Study in Transfer Programs (1)

Transfer Laboratory Science (8 Credits)

BIO 101	General Biology I (4)
BIO 102	General Biology II (4)

Social Science Elective (6 Credits):

ECO 201	Principles of Macroeconomics (3)
[or ECO 202	Principles of Microeconomics (3)]
PLS 135	American National Politics (3)

Humanities/Fine Arts Electives (6 Credits):

Courses may be selected from the following:

ART	101	History and Appreciation of Art I (3)
ART	102	History and Appreciation of Art II (3)
ART	201	History of Art I (3)
ART	202	History of Art II (3)
CST	130	Introduction to the Theatre (3)
MUS	121	Music Appreciation I (3)
MUS	122	Music Appreciation II (3)]

Minimum required for degree: 60 Credits

Sample Schedule

Teacher Education Preparation

FIRST YEAR

Fall Semester

ENG	111	College Composition I	3
HIS	121	United States History I	3
MTH	163	Precalculus I (or MTH 151)	3
SDV	101	Orientation to Education (or SDV 108)	1
Wellness Elective			<u>2</u>

Spring Semester

ART/MUS/CST	Humanities/Fine Arts Elective		3
ENG	112	College Composition II	3
HIS	122	United States History II	3
ITE	119	Information Literacy	3
MTH	241	Statistics I (or MTH 152)	3
PLS	135	American National Politics	<u>3</u>

SECOND YEAR

Fall Semester

BIO	101	General Biology I	4
ECO	201	Principles of Macroeconomics (or ECO 202)	3
EDU	200	Introduction to Teaching as a Profession	3
HIS	101	History of Western Civilization I (or HIS 102)	3
CST	110	Introduction to Communication	<u>3</u>

Spring Semester

ART/MUS/CST	Humanities/Fine Arts Elective		3
BIO	102	General Biology II	4
ENG	Literature Elective		3
GEO	210	People & the Land: Intro. to Cult. Geography	3
SDV	199	Supervised Study in Transfer Programs	<u>1</u>

Total Semester Hours: 60

Science

Award: Associate of Arts and Sciences

Length: 4 Semesters

Purpose: The curriculum is designed for the student who plans to complete a baccalaureate degree program. The transfer institution's catalog and transfer guide are the best sources of information for planning a course of study. Final responsibility for transferability of courses rests with the student and the registrar of that institution.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Other Information: Students planning ahead for this curriculum will find it most helpful to have completed college preparatory curriculum courses in high school in areas such as English, mathematics (two units of algebra and one of plane geometry), laboratory science, social studies, and foreign language.

Transfer Information: The student should become familiar with the requirements of the major department in the college or university to which transfer is contemplated and also consult the assigned academic advisor before planning a program of study. In order to prepare for junior class standing at a four-year college or university, the student must complete a program that is comparable in length and course content to the first two years of the program at the four-year institution.

Counselors have transfer guides from many institutions to assist in selection of courses. Every institution has unique requirements, so the student should investigate the programs of each institution under consideration for transfer.

Students should be particularly careful to select electives that correspond to requirements of the transfer institution.

Curriculum Requirements: Students must successfully complete all of the requirements listed below to be awarded this degree.

Program Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Use laboratory equipment in a safe and proficient manner.
- Demonstrate the ability to compose a formal scientific report.
- Demonstrate the ability to use scientific tools for processing, evaluation, and presentation.

General Education Requirements (22-24 Credits):

ENG 111-112 College Composition I-II (6)
 CST 110 Introduction to Communication (3)
 HIS 121-122 United States History I-II (6)
[or HIS 101-102 History of Western Civilization I-II (6)]
 Choose one of the following combinations to fulfill the Math requirement (choose based on the requirements of the transfer institution):

- [a] MTH 166 Precalculus with Trigonometry (4)
and MTH 273 Calculus 1 (4)
- [b] MTH 273 Calculus 1 (4)
and MTH 274 Calculus 2 (4)
- [c] MTH 166 Precalculus with Trigonometry (4)
and MTH 241 Statistics 1 (3)
or MTH 271 Applied Calculus 1 (3)
- [d] MTH 175 Calculus of One Variable 1 (3)
and MTH 176 Calculus of One Variable 11 (3)
and MTH 177 Introductory of Linear Algebra (2)
and MTH 178 Topics in Analytic Geometry (2)
- [e] MTH 163 Precalculus 1 (3)
and MTH 157 Elementary Statistics (3)
or MTH 241 Statistics 1 (3)
or MTH 271 Applied Calculus 1 (3)
- Wellness (1)— Health, P.E. or recreation courses which promote physical and emotional well being

Program Requirements (36 Credits):

NOTE: To select courses, student should consult the catalog of the institution(s) to which transfer is anticipated in addition to these degree requirements.

- ITE 119 Information Literacy (3)
- SDV 108 College Survival Skills (1)
- SDV 199 Supervised Study in Transfer Programs (1)

Transfer Laboratory Science (16 Credits):

Must complete 2 two-semester sequences

Social Science (6 Credits):

Courses may be selected from the following:

- ECO 201 Principles of Macroeconomics (3)
- ECO 202 Principles of Microeconomics (3)
- GEO 210 People & the Land: Intro. to Cult. Geography (3)
- PLS 211 U.S. Government I (3)
- PLS 212 U.S. Government II (3)
- PSY 200 Principles of Psychology (3)
- SOC 200 Principles of Sociology (3)
- SOC 268 Social Problems (3)

College Transfer Electives (6-8 Credits):

Selected from transfer courses in business, information technology, science, mathematics, engineering, physical education, social sciences, the humanities, and fine arts.

Fine Arts Electives (3 Credits):

Selected from college transfer courses in art, literature, foreign language, music, philosophy, religion, or communication studies and theatre.

Minimum required for degree: 60 Credits

Sample ScheduleScience**FIRST YEAR****Fall Semester**

ENG 111	College Composition I	3
HIS 121	United States History I <i>(or HIS 101)</i>	3
MTH 166	Precalculus with Trigonometry <i>(or other approved math requirement)</i>	4
SDV 108	College Survival Skills	1
	Science with Laboratory	4
	Wellness	<u>1</u>
		16

Spring Semester

ENG 112	College Composition II	3
HIS 122	United States History II <i>(or HIS 102)</i>	3
MTH 273	Calculus I <i>(or other approved math requirement)</i>	4
	Science with Laboratory	<u>4</u>
		14

SECOND YEAR**Fall Semester**

CST 110	Introduction to Communication	3
ITE 119	Information Literacy	3
	Science with Laboratory	4
	Social Science	3
	Fine Arts Elective	<u>3</u>
		16

Spring Semester

SDV 199	Supervised Study in Transfer Programs	1
	Science with Laboratory	4
	Social Science	3
	College Transfer Electives	<u>6</u>
		14

Total Semester Hours: 60

Administration of Justice

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: The curriculum is designed to provide a theoretical and practical understanding of the criminal justice profession in local, state, and federal criminal justice systems.

Program Learning Outcomes: Graduates of this program will demonstrate general and career specific skills. Graduates will have demonstrated proficiency for employment requirements of local and state police departments, federal agencies, correctional institutions, and security officers in commercial or industrial areas.

Occupational Objectives: The program prepares students for career service in the following areas: local and state police departments, federal agencies, correctional institutions, and security officers in commercial or industrial areas.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Curriculum Requirements: The student must satisfactorily complete all general education, program and elective requirements to receive this degree.

Graduation Requirements: In order to meet PHCC graduation requirements, all degree students must satisfactorily complete Virginia Community College System Core Competency testing standards. Core Competency testing is scheduled during a two week assessment period twice each year, once in October and once in March. Please see your program advisor to determine the best time for you to complete the testing.

General Education Requirements (21 Credits):

ENG 111-112 College Composition I-II (6)
 MTH 120 Introduction to Mathematics (3)
 HIS 101-102 History of Western Civilization (6)
[or HIS 121-122 U.S. History I-II (6)]
[or PLS 211-212 U.S. Government I-II (6)]
 CST 110 Introduction to Communication (3)
 Wellness (3)--Health, P.E. or recreation courses which promote physical and emotional well being.

Program Requirements (42 Credits):

ADJ 100 Survey of Criminal Justice (3)
 ADJ 105 The Juvenile Justice System (3)
 ADJ 107 Survey of Criminology (3)
 ADJ 111 Law Enforcement Organization & Administration I (3)
 ADJ 130 Introduction to Criminal Law (3)
 ADJ 131 Legal Evidence I (3)
 ADJ 146 Adult Correctional Institutions (3)
 ADJ 228 Narcotics and Dangerous Drugs (3)
 ADJ 236 Principles of Criminal Investigation (3)
 ADJ 237 Advanced Criminal Investigation (3)
 ADJ 280 Capstone Project (1)
 ADJ 299 Supervised Study in ADJ (1)
 ITE 115 Intro. to Computer Applications & Concepts (3)
 PSY 200 Introduction to Psychology I (3)
 SOC 200 Introduction to Sociology I (3)

SDV 101 Introduction to Administration of Justice (1)
 SDV 108 College Survival Skills (1)

Electives (3 Credits)

Minimum required for degree: 67 Credits

Sample Schedule

Administration of Justice

FIRST YEAR

Fall Semester

ADJ 100	Survey of Criminal Justice	3
ADJ 111	Law Enforcement Organization & Administration	3
ENG 111	College Composition I	3
ITE 115	Intro. to Computer Applications & Concepts	3
CST 110	Introduction to Communication	3
SDV 101	Introduction to Administration of Justice	1
SDV 108	College Survival Skills	<u>1</u>
		17

Spring Semester

ADJ 105	The Juvenile Justice System	3
ADJ 107	Survey of Criminology	3
ADJ 146	Adult Correctional Institutions	3
ADJ 228	Narcotics and Dangerous Drugs	3
ENG 112	College Composition II	3
PSY 200	Introduction to Psychology	<u>3</u>
		18

SECOND YEAR

Fall Semester

ADJ 130	Introduction to Criminal Law	3
ADJ 131	Legal Evidence I	3
MTH 120	Introduction to Mathematics	3
PLS 211	U.S. Government I <i>[or HIS 101 or HIS 121]</i>	3
SOC 200	Introduction to Sociology	<u>3</u>
		15

Spring Semester

ADJ 236	Principles of Criminal Investigation	3
ADJ 237	Advanced Criminal Investigation	3
ADJ 280	Capstone Project	1
ADJ 299	Supervised Study in ADJ	1
PLS 212	U.S. Government II <i>[or HIS 102 or HIS 122]</i>	3
Elective		3
Wellness		<u>3</u>
		17

Total Semester Hours: 67

Business Technology

Accounting Major

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: This program provides knowledge and skills leading to immediate employment in the field of accounting. People who wish to qualify for promotion in a present position to another field may benefit from this program. Students are strongly urged to consult their faculty advisor in planning programs.

Occupational Objectives: Some of the occupations and positions for which graduates of this program may qualify are accounting technician, junior accountant or accountant.

Potential Certification: A student may elect to take an industry-specific certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Office Specialist (MOS) - Excel
- American Institute of Professional Bookkeepers – Certified Bookkeeper (CB) (requires related work experience and code of ethics agreement)

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Curriculum Requirements: Students must satisfactorily complete all of the requirements listed below to be awarded this degree.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills in a business setting.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Describe and use general business knowledge and skills.
- Apply the principles of financial accounting, managerial accounting, tax accounting, cost accounting, and payroll accounting.
- Prepare and interpret financial statements.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.

General Education Requirements (20-21 Credits):

ECO 201 Principles of Macroeconomics (3)

[or ECO 202 Principles of Microeconomics (3)]

ENG 111 College Composition I (3)

ENG 112 College Composition II (3)

MTH 120 Introduction to Mathematics (3)

[or MTH 151 Mathematics for the Liberal Arts I (3)]

Science Elective [BIO, CHM, ENV, GOL, NAS, PHY] (3-4)

CST 110 Introduction to Communication (3)

Wellness (2)-- Health, P.E. or recreation courses which promote physical and emotional well being.

Program Requirements (48 Credits):

ACC 124 Payroll Accounting (3)

ACC 211-212 Principles of Accounting I-II (6)

ACC 215 Computerized Accounting (3)

ACC 221-222 Intermediate Accounting I-II (6)

ACC 231 Cost Accounting I (3)

ACC 261 Principles of Federal Taxation I (3)

ACC 290 Coordinated Internship (3)

[or ACC 297 Cooperative Education (3)]

ACC 299 Supervised Study in Accounting (1)

BUS 125 Applied Business Mathematics (3)

BUS 241 Business Law I (3)

FIN 215 Financial Management (3)

ITE 115 Intro. to Computer Applications & Concepts (3)

ITE 130 Introduction to Internet Services (3)

ITE 140 Spreadsheet Software (3)

SDV 101 Orientation to Business Technology (1)

SDV 108 College Survival Skills (1)

Minimum required for degree: 68 Credits

Sample Schedule

Accounting

FIRST YEAR

Fall Semester

ACC	211	Principles of Accounting I	3
BUS	241	Business Law I	3
ENG	111	College Composition I	3
ITE	115	Intro. to Computer Applications & Concepts	3
MTH	120	Introduction to Mathematics [or MTH 151]	3
SDV	101	Orientation to Business Technology	1
SDV	108	College Survival Skills	<u>1</u>
			17

Spring Semester

ACC	212	Principles of Accounting II	3
BUS	125	Applied Business Mathematics	3
CST	110	Introduction to Communication	3
ECO	201	Principles of Macroeconomics [or ECO 202]	3
ENG	112	College Composition II	3
ITE	140	Spreadsheet Software	<u>3</u>
			18

SECOND YEAR

Fall Semester

ACC	221	Intermediate Accounting I	3
ACC	215	Computerized Accounting	3
ACC	261	Principles of Federal Taxation I	3
ITE	130	Introduction to Internet Services	3
		Science Elective	3-4
		Wellness	<u>2</u>
			17-18

Spring Semester

ACC	124	Payroll Accounting	3
ACC	222	Intermediate Accounting II	3
ACC	231	Cost Accounting I	3
ACC	290	Coordinated Internship [or ACC 297]	3
ACC	299	Supervised Study in Accounting	1
FIN	215	Financial Management	<u>3</u>
			16

Total Semester Hours: 68-69

Business Technology

Administrative Support Technology Major

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: Individuals who are seeking their first employment or those who wish to qualify for promotion in a present position or to another field, including self-employment, may benefit from this program. This program prepares a student for work in a general office setting as well as offering skills in the legal and medical office areas. The program enables the student to become proficient in administrative duties and skills in a variety of companies -- including manufacturing, service-oriented, and government--or as a virtual assistant.

Occupational Objectives: Completion of this program may lead to employment or career advancement in any of a wide variety of positions such as administrative assistant, administrative secretary, executive secretary, medical secretary, medical transcriptionist, customer service representative, legal secretary, office services specialist, and clerical supervisor.

Potential Certification: A student may elect to take an industry-specific certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Office Specialist (MOS) - Word, Excel, PowerPoint, Access
- Certified Administrative Professional (CAP) and Certified Professional Secretary (CPS) - sponsored by the International Association of Administrative Professionals (IAAP) (requires related work experience)

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses. Students with deficiencies in computer skills or keyboarding will complete additional coursework.

Curriculum Requirements: The student must satisfactorily complete all requirements listed below to receive this degree.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills in a business setting.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Describe and use general business knowledge and skills.
- Produce a variety of business documents using correct grammar, punctuation and spelling in a form acceptable in today's business environment.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.

- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Demonstrate various methods of filing in storing and retrieving documents both manually and electronically.

General Education Requirements (19-20 Credits):

CST	110	Introduction to Communication (3)
ENG	111	College Composition I (3)
ENG	112	College Composition II (3)
MTH	120	Introduction to Mathematics (3)
[or MTH 151		Mathematics for the Liberal Arts I (3)]
Science Elective [BIO, CHM, ENV, GOL, NAS, PHY] (3-4)		
Social Science Elective [HIS, SOC, PSY, PLS, ECO, GEO] (3)		
Wellness		Health, P.E., or recreation courses which promote physical and emotional well being (1)

Program Requirements (49 Credits):

ACC	124	Payroll Accounting (3)
[or ACC 211		Principles of Accounting I (3)]
AST	101	Keyboarding I (3)
AST	102	Keyboarding II (3)
AST	113	Keyboarding for Speed and Accuracy (1)
[or AST 154		Introduction to Voice Recognition Software (1)]
AST	141	Word Processing (3)
AST	234	Records and Database Management (3)
AST	238	Word Processing Advanced Operations (3)
AST	243	Office Administration I (3)
AST	244	Office Administration II (3)
AST	260	Presentation Software (3)
AST	290	Coordinated Internship (3)
[or AST 297		Cooperative Education (3)]
AST	299	Supervised Study in AST (1)
BUS	125	Applied Business Mathematics (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	130	Introduction to Internet Services (3)
ITE	140	Spreadsheet Software (3)
SDV	101	Orientation to Business Technology (1)
SDV	108	College Survival Skills (1)
SPA	103	Basic Spoken Spanish I (3)

Minimum required for degree: 68-69 Credits

Sample Schedule

Administrative Support Technology

FIRST YEAR

Fall Semester

AST	101	Keyboarding I	3
CST	110	Introduction to Communication	3
ENG	111	College Composition I	3
ITE	115	Intro. to Computer Applications & Concepts	3
MTH	120	Introduction to Mathematics [or MTH 151]	3
SDV	101	Orientation to Business Technology	1
SDV	108	College Survival Skills	<u>1</u>
			17

Spring Semester

AST	102	Keyboarding II	3
AST	141	Word Processing I	3
AST	234	Records and Database Management	3
BUS	125	Applied Business Mathematics	3
ENG	112	College Composition II	3
ITE	140	Spreadsheet Software	<u>3</u>
			18

SECOND YEAR

Fall Semester

AST	238	Word Processing Advanced Operations	3
AST	243	Office Administration I	3
AST	260	Presentation Software	3
ITE	130	Introduction to Internet Services	3
SPA	103	Basic Spoken Spanish I	3
		Wellness Elective	<u>1</u>
			16

Spring Semester

ACC	124	Payroll Accounting [or ACC 211]	3
AST	113	Keyboarding for Speed & Accuracy [or AST 154]	1
AST	244	Office Administration II	3
AST	290	Coordinated Internship [or AST 297]	3
AST	299	Supervised Study in AST	1
		Science Elective	3-4
		Social Science Elective	<u>3</u>
			17-18

Total Semester Hours: 68-69

Business Technology

Administrative Support Technology Major

Medical Office Specialization

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: Individuals who are seeking their first employment or those who wish to qualify for promotion in a present position or to another field, including self-employment, may benefit from this program. This program prepares a student for work in a general office setting with specialized training in various medical office areas. The program enables the student to become proficient in administrative duties and provides additional skills in a medical setting.

Occupational Objectives: Completion of this program may lead to employment or career advancement in any of a wide variety of positions such as administrative assistant, administrative secretary, executive secretary, medical secretary, medical transcriptionist, medical coder, customer service representative, office services specialist, and clerical supervisor.

Potential Certification: A student may elect to take an industry-specific certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Office Specialist (MOS) - Word, PowerPoint, Access
- American Academy of Professional Coders – Certified Professional Coder (CPC) (requires related work experience and letters of recommendation)

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses. Students with deficiencies in computer skills or keyboarding will complete additional coursework.

Curriculum Requirements: The student must satisfactorily complete all requirements listed below to receive this degree.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills in a business setting.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Describe and use general business knowledge and skills.
- Produce a variety of business documents using correct grammar, punctuation and spelling in a form acceptable in today's business environment.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills

that reflect an understanding of diversity and teamwork.

- Demonstrate various methods of filing in storing and retrieving documents both manually and electronically.
- Apply medical vocabulary in producing documents used in the health field.

General Education Requirements (21-22 Credits):

CST	110	Introduction to Communication (3)
ENG	111	College Composition I (3)
ENG	112	College Composition II (3)
HLT	143	Medical Terminology I (3)
MTH	120	Introduction to Mathematics (3)
[or MTH 151		Mathematics for the Liberal Arts I (3)]
Science Elective [BIO, CHM, ENV, GOL, NAS, PHY]		(3-4)
Social Science Elective [HIS, SOC, PSY, PLS, ECO, GEO]		(3)

Program Requirements (47 Credits):

AST	101	Keyboarding I (3)
AST	102	Keyboarding II (3)
AST	154	Introduction to Voice Recognition Software (1)
AST	141	Word Processing (3)
AST	234	Records and Database Management (3)
AST	238	Word Processing Advanced Operations (3)
AST	243	Office Administration I (3)
AST	245	Medical Machine Transcription (2)
AST	260	Presentation Software (3)
AST	271	Medical Office Procedures I (3)
AST	290	Coordinated Internship (3)
[or AST 297		Cooperative Education (3)]
AST	299	Supervised Study in AST (1)
HIM	143	Managing Electronic Billing in a Med. Practice (2)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	130	Introduction to Internet Services (3)
ITE	140	Spreadsheet Software (3)
SPA	103	Basic Spoken Spanish I (3)
SDV	101	Orientation to Business Technology (1)
SDV	108	College Survival Skills (1)

Minimum required for degree: 68-69 Credits

Sample Schedule

Medical Office

FIRST YEAR

Fall Semester

AST	101	Keyboarding I	3
ENG	111	College Composition I	3
HLT	143	Medical Terminology I	3
ITE	115	Intro. to Computer Applications & Concepts	3
MTH	120	Introduction to Mathematics [or MTH 151]	3
SDV	101	Orientation to Business Technology	1
SDV	108	College Survival Skills	<u>1</u>
			17

Spring Semester

AST	102	Keyboarding II	3
AST	141	Word Processing I	3
AST	234	Records and Database Management	3
ENG	112	College Composition II	3
ITE	130	Introduction to Internet Services	3
ITE	140	Spreadsheet Software	<u>3</u>
			18

SECOND YEAR

Fall Semester

AST	238	Word Processing Advanced Operations	3
AST	243	Office Administration I	3
AST	245	Medical Machine Transcription	2
AST	260	Presentation Software	3
Science Elective			3-4
CST	110	Introduction to Communication	<u>3</u>
			17-18

Spring Semester

AST	154	Intro. to Voice Recognition Software	1
AST	271	Medical Office Procedures I	3
AST	290	Coordinated Internship [or AST 297]	3
AST	299	Supervised Study in AST	1
HIM	143	Managing Electronic Billing in a Med. Practice	2
Social Science Elective			3
SPA	103	Basic Spoken Spanish I	<u>3</u>
			16

Total Semester Hours: 68-69

Business Technology
Management Major

Award: Associate of Applied Science
Length: 4 Semesters

Purpose: This program provides knowledge and skills leading to immediate employment in the area of management upon completion of the degree. People who are seeking their first employment or wish to qualify for promotion in a present position to another field may benefit from this program.

Occupational Objectives: Graduates of this program may qualify for positions in general management, manufacturing or industrial management, customer service, sales management or retail management.

Potential Certification: A student may elect to take an industry-specific certification exam. Examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following exams:

- Microsoft Office Specialist (MOS) - Excel

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Curriculum Requirements: The student must satisfactorily complete requirements listed below to receive this degree.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills in a business setting.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Describe and use general business knowledge and skills, including managerial and supervisory concepts.
- Apply the principles of financial accounting.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Understand and demonstrate the ability to plan.
- Describe contemporary approaches to management and methods to create a positive work environment.

General Education Requirements (20-21 Credits):

CST	110	Introduction to Communication (3)
ECO	201	Principles of Macroeconomics (3)
		<i>[or ECO 202 Principles of Microeconomics (3)]</i>
ENG	111	College Composition I (3)
ENG	112	College Composition II (3)

MTH	120	Introduction to Mathematics (3)
		<i>[or MTH 151 Mathematics for the Liberal Arts I (3)]</i>
		Science Elective [BIO, CHM, ENV, GOL, NAS, PHY] (3-4)
		Wellness Health, P.E. or recreation courses which promote physical and emotional well-being (2)

Program Requirements (48 Credits):

ACC	211	Principles of Accounting I (3)
BUS	100	Introduction to Business (3)
BUS	125	Applied Business Mathematics (3)
BUS	165	Small Business Management (3)
BUS	200	Principles of Management (3)
BUS	205	Human Resource Management (3)
BUS	241	Business Law I (3)
BUS	280	Introduction to International Business (3)
BUS	290	Coordinated Internship (3)
		<i>[or BUS 297 Cooperative Education (3)]</i>
BUS	299	Supervised Study in Business Management (1)
FIN	215	Financial Management (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	130	Introduction to Internet Services (3)
ITE	140	Spreadsheet Software (3)
MKT	100	Principles of Marketing (3)
MKT	260	Customer Service Management (3)
SDV	101	Orientation to Business Technology (1)
SDV	108	College Survival Skills (1)

Minimum required for degree: 68-69 Credits

Sample Schedule Management

FIRST YEAR

Fall Semester

BUS	100	Introduction to Business	3
ENG	111	College Composition I	3
ITE	115	Intro. to Computer Applications & Concepts	3
MTH	120	Introduction to Mathematics [or MTH 151]	3
SDV	101	Orientation to Business Technology	1
SDV	108	College Survival Skills	1
CST	110	Introduction to Communication	<u>1</u>
			17

Spring Semester

BUS	125	Applied Business Mathematics	3
BUS	200	Principles of Management	3
ECO	201	Principles of Macroeconomics [or ECO 202]	3
ENG	112	College Composition II	3
ITE	130	Introduction to Internet Services	3
ITE	140	Spreadsheet Software	<u>3</u>
			18

SECOND YEAR

Fall Semester

ACC	211	Principles of Accounting I	3
BUS	205	Human Resource Management	3
BUS	241	Business Law I	3
BUS	280	Introduction to International Business	3
MKT	100	Principles of Marketing	3
Wellness Elective			<u>2</u>
			17

Spring Semester

BUS	165	Small Business Management	3
BUS	290	Coordinated Internship [or BUS 297]	3
BUS	299	Supervised Study in Business Management	1
FIN	215	Financial Management	3
MKT	260	Customer Service Management	3
Science Elective			<u>3-4</u>
			16-17

Total Semester Hours: 68-69

Business Technology

Management Major

E-Commerce Management Specialization

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: Individuals seeking their first job or those who wish to qualify for promotion in a present position or to another field, including self-employment, may benefit from this program. Students will be provided knowledge, skills, and training necessary to perform mid-management level functions in a company using the Internet for marketing or sales or any company wanting to begin e-commerce in their operations. Coursework includes instruction in mathematics, critical thinking, technical writing, interpersonal relationships, communications, team building, human relations, management, law, computer applications and the Internet, accounting, marketing, electronic commerce, electronic marketing, web page design, and other areas related to electronic commerce and business management.

Occupational Objectives: Completing this program may lead to employment or career advancement in a wide variety of positions such as Internet marketing specialist, e-commerce specialist, web page designer, electronic business advisor, or electronic advertising specialist.

Potential Certification: Students may elect to take an industry-specific certification exam, which generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Office Specialist (MOS) – Excel

Curriculum Requirements: The student must satisfactorily complete requirements listed below to receive this degree.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills in a business setting.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Describe and use general business knowledge and skills, including managerial and supervisory concepts.
- Apply the principles of financial accounting.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Understand and demonstrate the ability to develop a comprehensive business plan.
- Understand contemporary approaches to management and methods to create a positive work environment.
- Demonstrate knowledge of skills and abilities needed to become a successful entrepreneur.

General Education Requirements (20-21 Credits):

CST	110	Introduction to Communication (3)
ECO	201	Principles of Macroeconomics (3)
[or ECO	202	Principles of Microeconomics (3)]
ENG	111	College Composition I (3)
ENG	112	College Composition II (3)
MTH	120	Introduction to Mathematics (3)
[or MTH	151	Mathematics for the Liberal Arts I (3)]
Science Elective		[BIO, CHM, ENV, GOL, NAS, PHY] (3-4)
Wellness		Health, P.E., or recreation courses which promote physical and emotional well-being. (2)

Program Requirements (48 Credits):

ACC	211	Principles of Accounting I (3)
BUS	100	Introduction to Business (3)
BUS	125	Applied Business Mathematics (3)
BUS	200	Principles of Management (3)
BUS	241	Business Law I (3)
BUS	280	Introduction to International Business (3)
BUS	290	Coordinated Internship (3)
[or BUS	297	Cooperative Education (3)]
BUS	299	Supervised Study in Business Management (1)
FIN	215	Financial Management (3)
ITD	110	Web Page Design I (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	130	Introduction to Internet Services (3)
ITE	140	Spreadsheet Software (3)
MKT	100	Principles of Marketing (3)
MKT	260	Customer Service Management (3)
MKT	281	Principles of Internet Marketing (3)
SDV	101	Orientation to Business Technology (1)
SDV	108	College Survival Skills (1)

Minimum required for degree: 68-69 Credits

Sample Schedule
E-Commerce Management

FIRST YEAR

Fall Semester

BUS	100	Introduction to Business	3
ENG	111	College Composition I	3
ITE	115	Intro. to Computer Applications & Concepts	3
MTH	120	Introduction to Mathematics <i>[or MTH 151]</i>	3
SDV	101	Orientation to Business Technology	1
SDV	108	College Survival Skills	1
CST	110	Introduction to Communication	<u>3</u>
			17

Spring Semester

BUS	125	Applied Business Mathematics	3
BUS	200	Principles of Management	3
ENG	112	College Composition II	3
ITE	130	Introduction to Internet Services	3
ITE	140	Spreadsheet Software	3
MKT	281	Principles of Internet Marketing	<u>3</u>
			18

SECOND YEAR

Fall Semester

ACC	211	Principles of Accounting I	3
BUS	241	Business Law I	3
BUS	280	Introduction to International Business	3
ITD	110	Web Page Design I	3
MKT	100	Principles of Marketing	3
Wellness Elective			<u>2</u>
			17

Spring Semester

BUS	290	Coordinated Internship <i>[or BUS 297]</i>	3
BUS	299	Supervised Study in Business Management	1
ECO	201	Principles of Macroeconomics <i>[or ECO 202]</i>	3
FIN	215	Financial Management	3
MKT	260	Customer Service Management	3
Science Elective			<u>3-4</u>
			16-17

Total Semester Hours: 68-69

Business Technology
Management Major

Entrepreneurship/Small Business Specialization

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: Individuals, who are seeking their first job or those who wish to qualify for promotion in a present position or to another field, including self-employment, may benefit from this program. Students will be provided knowledge, skills, and training necessary to start a business and manage the functional areas of the business to become a successful entrepreneur. Coursework includes instruction in mathematics, critical thinking, technical writing, interpersonal relationships, communications, team building, human relations, management, law, computer applications and the Internet, accounting, marketing, international business, electronic commerce, small business management, small business marketing, taxation for the small business, financing for the small business, and other areas related to small business management and the entrepreneur.

Occupational Objectives: Completion of this program may lead to employment or career advancement in a wide variety of positions such as entrepreneur, small business owner, small business advisor, small business partner, proprietor, owner-operator, or consultant for small business.

Potential Certification: A student may elect to take an industry-specific certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Office Specialist (MOS) – Excel
- Curriculum Requirements: The student must satisfactorily complete requirements listed below to receive this degree.
- Program Learning Outcomes: A student will be able to:
- Demonstrate effective verbal and written communication skills in a business setting.
 - Apply mathematical and scientific reasoning skills to formulate and solve problems.
 - Describe and use general business knowledge and skills, including managerial and supervisory concepts.
 - Apply the principles of financial accounting.
 - Demonstrate proficiency in personal computer operations and applications.
 - Demonstrate proficiency in information literacy.
 - Demonstrate ability to reason critically and problem-solve.
 - Demonstrate proficiency in oral communication methods.
 - Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
 - Understand and demonstrate the ability to plan and development of a comprehensive business plan.
 - Understand contemporary approaches to management and methods to create a positive work environment.
 - Understand the importance of entrepreneurial behavior and the characteristics of successful entrepreneurs.

General Education Requirements (20-21 Credits):

ECO 201	Principles of Macroeconomics (3)
[or ECO 202	<i>Principles of Microeconomics (3)]</i>
ENG 111	College Composition I (3)
ENG 112	College Composition II (3)
MTH 120	Introduction to Mathematics (3)
[or MTH 151	<i>Mathematics for the Liberal Arts I (3)]</i>
Science Elective	[BIO, CHM, ENV, GOL, NAS, PHY] (3-4)
CST 110	Introduction to Communication (3)
Wellness	Health, P.E., or recreation courses which promote physical and emotional well-being. (2)

Program Requirements (48 Credits):

ACC 134	Small Business Taxes (3)
ACC 211	Principles of Accounting I (3)
BUS 100	Introduction to Business (3)
BUS 116	Entrepreneurship (3)
BUS 125	Applied Business Mathematics (3)
BUS 160	Legal Aspects for Small Business Operations (1)
BUS 165	Small Business Management (3)
BUS 241	Business Law I (3)
BUS 280	Introduction to International Business (3)
BUS 290	Coordinated Internship (3)
[or BUS 297	<i>Cooperative Education (3)]</i>
[or Approved Elective (3)]	
BUS 299	Supervised Study in Business Management (1)
FIN 260	Financial Management for Small Business (2)
ITE 115	Intro. to Computer Applications & Concepts (3)
ITE 130	Introduction to Internet Services (3)
ITE 140	Spreadsheet Software (3)
MKT 160	Marketing for Small Business (3)
MKT 260	Customer Service Management (3)
SDV 101	Orientation to Business Technology (1)
SDV 108	College Survival Skills (1)

Minimum required for degree: 68-69 Credits**Sample Schedule**Entrepreneurship/Small Business**FIRST YEAR****Fall Semester**

BUS 100	Introduction to Business	3
ENG 111	College Composition I	3
ITE 115	Intro. to Computer Applications & Concepts	3
MTH 120	Introduction to Mathematics [or MTH 151]	3
SDV 101	Orientation to Business Technology	1
SDV 108	College Survival Skills	1
CST 110	Introduction to Communication	<u>3</u>
		17

Spring Semester

BUS 116	Entrepreneurship	3
BUS 125	Applied Business Mathematics	3
ENG 112	College Composition II	3
ITE 140	Spreadsheet Software	3
Science Elective		3-4
Wellness Elective		<u>2</u>
		17-18

SECOND YEAR**Fall Semester**

ACC 211	Principles of Accounting I	3
BUS 165	Small Business Management	3
BUS 241	Business Law I	3
BUS 280	Introduction to International Business	3
ECO 201	Principles of Macroeconomics [or ECO 202]	3
MKT 160	Marketing for Small Business	<u>3</u>
		18

Spring Semester

ACC 134	Small Business Taxes	3
BUS 160	Legal Aspects for Small Business Operations	1
BUS 290	Coordinated Internship [or BUS 297]	3
BUS 299	Supervised Study in Business Management	1
FIN 260	Financial Management for Small Business	2
ITE 130	Introduction to Internet Services	3
MKT 260	Customer Service Management	<u>3</u>
		16

Total Semester Hours: 68-69

Business Technology

Management Major

International Business Specialization

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: Individuals seeking their first job or who wish to qualify for promotion in a present position or to another field, including self-employment may benefit from this program. Students will be provided knowledge, skills, and training necessary to perform mid-management level functions in a company involved in international business or trade and marketing goods or services to international locations. Course work includes instruction in math, critical thinking, technical writing, interpersonal skills, communications, team building, management, law, computer applications and the Internet, accounting, marketing, international business, international marketing, foreign trade, foreign currencies, international economics, foreign language, and other areas related to international business.

Occupational Objectives: Completion of this program may lead to employment or career advancement in a wide variety of positions such as office manager for an international firm, account representative for a multi-national business, import/export manager, international marketing specialist, overseas branch manager, manager in a state or federal government office with international responsibilities, or international salesperson.

Potential Certification: A student may elect to take an industry-specific certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Office Specialist (MOS) – Excel

Curriculum Requirements: The student must satisfactorily complete requirements listed below to receive this degree.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills in a business setting.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Describe and use general business knowledge and skills, including managerial and supervisory concepts.
- Apply the principles of financial accounting.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Demonstrate the ability to plan.
- Describe contemporary approaches to management and methods to create a positive work environment.

- Demonstrate knowledge of the global business concepts and differences among various countries related to business practices.

General Education Requirements (20-21 Credits):

ECO 201 Principles of Macroeconomics (3)
[or ECO 202 Principles of Microeconomics (3)]
ENG 111 College Composition I (3)
ENG 112 College Composition II (3)
MTH 120 Introduction to Mathematics (3)
[or MTH 151 Mathematics for the Liberal Arts I (3)]
Science Elective [BIO, CHM, ENV, GOL, NAS, PHY] (3-4)
CST 110 Introduction to Communication (3)
Wellness Health, P.E., or recreation courses which promote physical and emotional well-being. (2)

Program Requirements (48 Credits):

ACC 211 Principles of Accounting I (3)
BUS 100 Introduction to Business (3)
BUS 125 Applied Business Mathematics (3)
BUS 200 Principles of Management (3)
BUS 241 Business Law I (3)
BUS 280 Introduction to International Business (3)
BUS 290 Coordinated Internship (3)
[or BUS 297 Cooperative Education (3)]
BUS 299 Supervised Study in Business Management (1)
FIN 215 Financial Management (3)
GEO 210 People and the Land: Introduction to Cultural Geography (3)
ITE 115 Intro. to Computer Applications & Concepts (3)
ITE 130 Introduction to Internet Services (3)
ITE 140 Spreadsheet Software (3)
MKT 100 Principles of Marketing (3)
MKT 275 International Marketing (3)
SDV 101 Orientation to Business Technology (1)
SDV 108 College Survival Skills (1)
Foreign Language Elective (3)

Minimum required for degree: 68-69 Credits

Sample Schedule

International Business

FIRST YEAR

Fall Semester

BUS	100	Introduction to Business	3
CST	110	Introduction to Communication	3
ENG	111	College Composition I	3
ITE	115	Intro. to Computer Applications & Concepts	3
MTH	120	Introduction to Mathematics [or MTH 151]	3
SDV	101	Orientation to Business Technology	1
SDV	108	College Survival Skills	<u>1</u>
			17

Spring Semester

BUS	125	Applied Business Mathematics	3
BUS	200	Principles of Management	3
BUS	280	Introduction to International Business	3
ECO	201	Principles of Macroeconomics [or ECO 202]	3
ENG	112	College Composition II	3
ITE	140	Spreadsheet Software	<u>3</u>
			18

SECOND YEAR

Fall Semester

ACC	211	Principles of Accounting I	3
BUS	241	Business Law I	3
GEO	210	People & the Land: Intro. to Cultural Geography	3
ITE	130	Introduction to Internet Services	3
MKT	100	Principles of Marketing	3
Wellness Elective			<u>2</u>
			17

Spring Semester

BUS	290	Coordinated Internship [or BUS 297]	3
BUS	299	Supervised Study in Business Management	1
FIN	215	Financial Management	3
Foreign Language Elective			3
MKT	275	International Marketing	3
Science Elective			<u>3-4</u>
			16-17

Total Semester Hours: 68-69

Education Assisting

Award: Associate of Applied Science

Length: 5 Semesters

Purpose: The program is designed to meet a current workforce development need within the educational delivery system. It will provide the basic or entry-level skill sets required within the teaching profession as it relates to direct instruction and a variety of instructional assistance. Graduates will be prepared to meet Virginia certification (PRAXIS) requirements for preschool public and private agencies as well as public school teaching assistants. Students will learn to use an array of teaching methods, approaches to classroom management, and styles of behavior guidance. The program is a terminal degree for regional workforce development and not intended for transfer. Students who know they want to acquire a bachelor's degree and a license to teach should investigate the PHCC General Studies degree.

Program Learning Outcomes: The graduate of the program will be qualified to facilitate learning in a variety of environments.

Occupational Objectives: Graduates of this program may qualify as educators in a variety of facilities and capacities such as teacher's aides, public school tutors, and various positions in day care settings including but not limited to directors/administrators.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or Mathematics will complete appropriate developmental prerequisites, prior to enrollment in the program requirements. Students with deficiencies in computer skills will complete additional coursework.

Curriculum Requirements: The student must satisfactorily complete all general education requirements and program requirements to receive an Associate of Applied Science in Education Assisting.

Graduation Requirements: In order to meet PHCC graduation requirements, all degree students must satisfactorily complete Virginia Community College System Core Competency testing standards. Core Competency testing is scheduled during a two week assessment period twice each year, once in October and once in March. Please see your program advisor to determine the best time for you to complete the testing.

General Education Requirements (23 Credits)

ENG 111	College Composition I (3)
ENG 112	College Composition II (3)
HLT 100	First Aid and Cardiopulmonary Resuscitation (3)
MTH 151	Mathematics for the Liberal Arts I (3)
PSY 200	Introduction to Psychology (3)
PSY 230	Developmental Psychology (3)
SPA 103	Basic Spoken Spanish I (3)
SDV 101	Orientation to Education as a Discipline (1)
SDV 108	College Survival Skills (1)

Program Requirements (43 Credits)

CHD 118	Methods and Materials in the Language Arts for Children (3)
CHD 125	Creative Activities for Children (3)
CHD 126	Science and Math Concepts for Children (3)
CHD 165	Observation and Participation in ECE Settings (3)
CHD 210	Introduction to Exceptional Children (3)
CHD 220	Introduction to School Age Child Care (3)

[or CHD 120]	Introduction to Early Childhood Education]
CHD 225	Curriculum Development for School Age Children (3)
[or CHD 145 Teaching Art, Music and Movement to Children (3)]	
CHD 230	Behavior Manage. for School-Age Child Care (3)
[or CHD 205 Guiding the Behavior of Children (3)]	
CHD 235	Health/Recreation - School-age Child Care (3)
[or CHD 270 Administration of Early Childhood Programs(3)]	
CHD 265	Observation and Participation in Early Childhood/Primary Settings (3)
EDU 200	Introduction to Teaching as a Profession (3)
EDU 225	Audio Visual Materials & Computer Software (3)
EDU 299	Supervised Study in Education Assisting (1)
ITE 115	Intro. to Computer Applications & Concepts (3)

Minimum required for degree: 66 Credits

Sample Schedule

Education Assisting

FIRST YEAR

Fall Semester

ENG 111	College Composition I	3
ITE 115	Intro. to Computer Applications & Concepts	3
CHD 165	Observation & Participation in ECE Settings	3
HLT 100	First Aid and Cardiopulmonary Resuscitation	3
SDV 101	Orientation to Education as a Discipline	1
SDV 108	College Survival Skills	<u>1</u>
		14

Spring Semester

CHD 220	Introduction to School Age Child Care	3
ENG 112	College Composition II	3
SPA 103	Basic Spoken Spanish I	3
MTH 120	Introduction to Mathematics	3
PSY 200	Introduction to Psychology	<u>3</u>
		15

Summer Session

CHD 225	Curriculum Development for School Age Children	3
EDU 225	Audio Visual Materials & Computer Software	<u>3</u>
		6

SECOND YEAR

Fall Semester

CHD 118	Language Arts for Young Children	3
CHD 265	Adv. Observation & Participation in Early Childhood Settings	3
EDU 200	Introduction to Teaching as a Profession	3
EDU 235	Health, Safety and Nutrition	3
PSY 230	Developmental Psychology	<u>3</u>
		15

Spring Semester

CHD 126	Science & Math Concepts for Children	3
CHD 230	Behavior Management for School Age Child Care	3
CHD 235	Health and Recreation for School Age Child Care	3
CHD 210	Introduction to Exceptional Children	3
CHD 125	Creative Activities for Children	3
EDU 299	Supervised Study in Education Assisting	<u>1</u>
		16

Total Semester Hours: 66

Emergency Medical Services

Paramedic Major

Award: Associate of Applied Science

Length: 5 Semesters

Purpose: This program is designed to provide knowledge and skills to prepare selected students to qualify as practitioners of emergency medical services in a variety of health service facilities. After successful completion of the program, students will be eligible for the National Registry of Emergency Medical Technicians Paramedic Certification examination.

Program Learning Outcomes: Graduates of the program will have the knowledge and skills to practice as a paramedic in a variety of health service facilities. A graduate of the program will have demonstrated mastery of generic and specific basic and advanced life support paramedic skills prior to graduation. Skill attainment is assured through regular, valid and reliable comprehensive assessment.

Special Accreditation Status: The program is accredited by the Virginia Department of Health, Office of Emergency Medical Services.

Occupational Objectives: Employment opportunities for the paramedic include pre-hospital EMS agencies, municipal fire departments, emergency departments in hospitals, nursing homes, physician's offices, clinics, industry, and home health care agencies.

Admission Requirements: The applicant must meet the following requirements for admission to the EMS Education program. Interested students should contact the EMS Program Director for academic advising.

1. Be accepted as a student to the college.
2. Graduation from high school or satisfactory completion of the GED. Verification of high school graduation or GED is required by Virginia OEMS for this level of certification. Submission of official transcripts or GED scores is mandatory for all applicants.
3. Completion of PHCC Admission Placement tests unless appropriate college level English or math courses have been successfully completed. If any developmental courses in English or math are needed as indicated by student's scores, these courses must be successfully completed before the student can enroll in EMS 151 – Introduction to Advanced Life Support. Failure to successfully complete pre-requisites for enrollment in EMS 151 will delay program progression in the EMS curriculum by one academic year.
4. A cumulative college grade point average of 2.0 or better in all related and general education requirements completed before admission into the EMS Education program is desired and will be given higher priority for admission into the program.
5. Students currently enrolled at the college, in addition to students holding current Virginia certification as either an Emergency Medical Technician, EMT-Enhanced, EMT-Intermediate or holding current National Registry EMT-

Intermediate certification, will be given priority for admission into the program and may be considered for advanced placement after all other admission requirements are met.

6. Submit an EMS Program Application form along with required paperwork, i.e. high school transcripts, college transcripts, current EMS certification, etc. during the specified EMS Education program application period.

Admission Procedure: Applications to the program will be accepted during the specified EMS Education program application periods. After the application period has concluded all completed application files will be reviewed and considered. Qualified applicants enrolled at the college or holding current Virginia certification as an Emergency Medical Technician, Virginia EMT-Enhanced, or holding current National Registry and/or Virginia EMT-Intermediate certification will be given first priority for admission. Incomplete files will not be considered. **A completed application file includes the following:**

1. The completed EMS Program Application form.
2. Official transcripts of all high school work and all prior college work other than PHCC.
3. Results of the college placement tests, if not from PHCC.
4. A copy of your Virginia EMS certification, if applicable.

Because the EMS Education program addresses the educational needs of students with a variety of experiences and prior education, a limited number of entering class positions may be designated for certified EMT-Intermediates who graduated from accredited programs or for prospective high school graduates who also have been enrolled at PHCC as part of an EMT approved program of dual enrollment. Interested high school sophomores should see their counselors in the spring of their sophomore year. Interested high school juniors should see their counselors in the fall of their junior year.

The typical physical demands of a paramedic include the following: full range of motion including handling and lifting patients and/or equipment, manual and finger dexterity and eye-hand coordination. The job generally requires standing, walking for extensive periods of time, and working in all type of environments. The paramedic should be able to lift and carry items weighing up to 50 pounds. The job settings may have stressful conditions and/or irregular hours. There is a potential for exposure to communicable diseases. After admission to the EMS Education program, the prospective student is provided with an EMS Physical Examination form that must be completed by a physician prior to enrolling in the clinical or field internship classes.

Upon admission, all students are required to undergo mandatory drug screening. Students must have a negative drug screen in order to begin the clinical or field internship classes.

Please note that any prospective EMS student with a criminal conviction needs to speak with the EMS Program Director prior to enrollment at PHCC. Certain convictions will prevent the person from being certified as an Emergency Medical Services Provider in Virginia. Students must produce a satisfactory criminal background

check to the standards of all clinical agencies used by the college for experiential learning prior to enrolling in the EMS program.

Readmission Requirements: Any student wishing to reenroll in the EMS Education program must have at least a 2.0 cumulative grade point average at PHCC to be considered. A student who wishes to re-enter the EMS Education program must follow the procedure outlined in the EMS Education Program Student Handbook. The student may be required to enroll in and satisfactorily complete specific courses before and/or after readmission. Additional data may be required. The EMS faculty will consider each student's application for readmission and the decision to readmit will be based on additional data, prior performance in the EMS Education program and space availability.

Students who fail an EMS course or withdraw for any reason from the EMS Education program may be readmitted to the program only once. All readmissions are at the discretion of the EMS faculty.

Advanced Placement: Currently certified Virginia EMT, EMT-Enhanced or EMT-Intermediate providers may be eligible for advanced placement. (NREMT-Intermediate will be accepted).

Financial Requirements: In addition to the usual college tuition and fees, this program requires additional expenses. Approximate costs include:

Drug Screening	minimum of \$50
Criminal Background Checks	minimum of \$100
Books	\$650
Uniforms	\$100
Physical Examination	\$100
AHA BCLS CPR certification	\$125
Transportation to clinical agencies, seminars, etc. as required.	

Transfer of EMS Credit: Students seeking to transfer credit received from EMS courses at other institutions will be considered on an individual basis by the EMS faculty. The student may be asked to provide course descriptions, course syllabi, achievement scores and selected data from the course instructor in order to determine placement in the EMS program, subject to availability of space. Since there frequently are differences among EMS programs, students wishing to transfer should be aware that there might be an interruption in program progression.

Curriculum Requirements: In addition to formal lectures and laboratory exercises, selected experiences within driving distance of the college will be scheduled at day, evening and/or weekend times, depending on availability of facilities.

EMS students will be required to successfully pass cognitive and psychomotor examinations at various points in the curriculum in order to continue in the program. Students who are unsuccessful will be counseled and guided in a specified number of remediation efforts. Upon successful completion of remedial requirements and passing the appropriate examinations, students may continue in the program.

To remain in the program, a student must have a "C" or above in all required EMS courses. Additionally, a grade of "C" or above in all semesters of biology and psychology is required to meet degree requirements.

In order to graduate, students must also be able to demonstrate the college's specified computer competency requirements.

General Education Requirements (12 Credits):

CST 110	Introduction to Speech Communication (3)
ENG 111	College Composition I (3)
ITE 115	Intro. to Computer Applications & Concepts (3)
PSY 230	Developmental Psychology (3)

Program Requirements (57 Credits):

EMS 111	Emergency Medical Technician – Basic (7)
EMS 120	EMT-Basic Clinical (1)
EMS 151	Introduction to Advanced Life Support (4)
EMS 153	Basic ECG Recognition (2)
EMS 155	ALS Medical Care (4)
EMS 157	ALS Trauma Care (3)
EMS 159	ALS Special Populations (3)
EMS 170	ALS Internship I (2)
EMS 172	ALS Clinical Internship II (2)
EMS 173	ALS Field Internship II (1)
EMS 201	Professional Development (3)
EMS 205	Advanced Pathophysiology (4)
EMS 207	Advanced Patient Assessment (3)
EMS 209	Advanced Pharmacology (4)
EMS 211	Operations (2)
EMS 242	ALS Clinical Internship III (1)
EMS 243	ALS Field Internship III (1)
EMS 244	ALS Clinical Internship IV (1)
EMS 245	ALS Field Internship IV (1)
EMS 299	Supervised Study in Emergency Medical Services (1)
EMS/HLT	Electives (2)
NAS 150	Human Biology (4)
<i>[or BIO 231 Human Anatomy and Physiology I (4) or BIO 232 Human Anatomy and Physiology II (4)]</i>	
SDV 108	College Survival Skills (1)

Minimum required for degree: 69 Credits

Sample Schedule

Emergency Medical Services

Paramedic Major

FIRST YEAR

Spring Semester

EMS 111	Emergency Medical Technician – Basic	7
EMS 120	EMT-Basic Clinical	1
NAS 150	**Human Biology	4
SVD 108	College Survival Skills	<u>1</u>
		13

Fall Semester

EMS 151	Introduction to Advanced Life Support	4
EMS 153	Basic ECG Recognition	2
EMS 157	ALS Trauma Care	3
EMS 170	ALS Internship I	2
ENG 111	College Composition I	<u>3</u>
		14

Spring Semester

EMS 155	ALS Medical Care	4
EMS 159	ALS Special Populations	3
EMS 172	ALS Clinical Internship II	2
EMS 173	ALS Field Internship II	1
EMS/HLT	Elective	1
CST 110	Introduction to Speech Communication	<u>3</u>
		14

SECOND YEAR

Fall Semester

EMS 201	Professional Development	3
EMS 205	Advanced Pathophysiology	4
EMS 207	Advanced Patient Assessment	3
EMS 242	ALS Clinical Internship III	1
EMS 243	ALS Field Internship III	1
PSY 230	Developmental Psychology	<u>3</u>
		15

Spring Semester

EMS 209	Advanced Pharmacology	4
EMS 211	Operations	2
EMS 244	ALS Clinical Internship IV	1
EMS 245	ALS Field Internship IV	1
EMS 299	Supervised Study in Emergency Medical Services	1
EMS/HLT	Elective	1
ITE 115	Introduction to Computer Applications	<u>3</u>
		13

Total Semester Hours: 69

General Engineering Technologies

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: Upon successful completion of this program, graduates will possess broad skills in both the application of theories and hands-on experience in a variety of manufacturing related disciplines. Students seeking the unique technical skills in a specific discipline should review related PHCC programs of study.

Program Learning Outcomes: Program graduates' have generic and specific occupational skills to be competitive in technology-based positions in a variety of engineering settings such as industrial, manufacturing, and commercial. Graduates demonstrate proficiency in 21st Century skills and use of current technological tools of the profession.

Occupational Objectives: Graduates will be qualified in jobs such as engineer's assistant, supervisor trainee, manufacturing specialist, quality assurance auditor, CAD technician, maintenance lead person, team leader, and computer controlled process technician.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Curriculum Requirements: The student must satisfactorily complete all requirements to receive an Associate of Applied Science Degree in Engineering Technologies.

Graduation Requirements: In order to meet PHCC graduation requirements, all degree students must satisfactorily complete Virginia Community College System Core Competency testing standards. Core Competency testing is scheduled during a two week assessment period twice each year, once in October and once in March. Please see your program advisor to determine the best time for you to complete the testing.

Advancement Options: Old Dominion University, East Tennessee State University, Virginia State University, and North Carolina A&T offers graduates of this program advanced credit transfer options for completing a baccalaureate degree. Program specializations offer Industry Certification Examinations.

General Education Requirements (21 Credits):

ECO 201 Principles of Macroeconomics (3)

[or ECO 202 Principles of Microeconomics (3)]

ENG 111 College Composition I (3)

ENG 112 College Composition II (3)

HLT 100 First Aid and Cardiopulmonary Resuscitation (3)

MTH 163 Pre-Calculus I (3)

CST 110 Introduction to Communication (3)

Social Science Elective (3)

Core Program Requirements (36 Credits):

DRF	200	Survey of Computer Aided Drafting (3)
DRF	226	Computer Aided Machining (3)
EGR	120	Introduction to Engineering (2)
EGR	206	Engineering Economics (3)
EGR	285	Capstone Project (1)
EGR	299	Supervised Study in Engineering (1)
ELE	113	Electricity I (3)
IND	101	Quality Assurance Technology I (3)
IND	137	Team Concepts & Problem Solving (3)
IND	190	Coordinated Internship (2)
IND	290	Coordinated Internship (2)
ITE	115	Intro. to Computer Applications & Concepts (3)
MEC	113	Material & Processes of Industry (3)
PHY	131	Applied Physics I (3)
SDV	108	College Survival Skills (1)

Technical Electives (12 credits)

See engineering advisor for approved sequence.

Minimum required for degree: 69 Credits

Sample ScheduleGeneral Engineering Technologies**FIRST YEAR****Fall Semester**

ENG	111	College Composition I	3
ELE	113	Electricity I	3
EGR	120	Introduction to Engineering	2
ITE	115	Intro. to Computer Applications & Concepts	3
MTH	163	Pre-Calculus I	3
SDV	108	College Survival Skills	<u>1</u>
			15

Spring Semester

EGR	206	Engineering Economics	3
DRF	200	Survey of Computer Aided Drafting	3
ENG	112	College Composition II	3
HLT	100	First Aid and Cardiopulmonary Resuscitation	3
MEC	113	Materials and Processes of Industry	3
CST	110	Introduction to Communication	<u>3</u>
			18

SECOND YEAR**Fall Semester**

ECO	201	Principles of Macroeconomics [or ECO 202]	3
IND	101	Quality Assurance Technology I	3
IND	190	Coordinated Internship	2
DRF	226	Computer Aided Machining	3
Social Science Elective			3
Elective			<u>4</u>
			18

Spring Semester

EGR	285	Capstone Project	1
IND	137	Team Concepts & Problem Solving	3
IND	290	Coordinated Internship	2
PHY	131	Applied Physics I	3
Electives			8
EGR	299	Supervised Study in Engineering	<u>1</u>
			18

Total Semester Hours: 69

Health Technology**Nursing Major**

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: The nursing major prepares selected students to qualify as practitioners of technical nursing in a variety of health service facilities. After successful completion of the program, students will be eligible for the National Council Licensure Exam-Registered Nurse (NCLEX-RN) in the Commonwealth of Virginia.

Program Learning Outcomes: Graduates of the program will have the knowledge and skills to practice as a graduate nurse and be eligible to take the National Council Licensure Examination for Registered Nurses. A graduate of the program will have demonstrated mastery of generic and specific nursing skills prior to graduation. Skill attainment is assured through regular, valid and reliable comprehensive assessment.

Special Accreditation Status: The program is approved by the Virginia Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC).

NCLEX-RN Pass Rates for PHCC, State and National last 5 years:

	PHCC	State	National
2012	92.11%	90.43%	90.34%
2011	86.96%	89.5%	89.32%
2010	77.78%	86.26%	89.91%
2009	80.65%	87.33%	88.07%
2008	87.23%	84.97%	88.23%

Occupational Objectives: Employment opportunities for the registered nurse include staff positions in hospitals, long term care facilities, rehabilitation centers, health departments, physicians' offices, clinics, day care centers, industry, and home health care agencies. They also work in correctional facilities, schools, summer camps, and with the military.

Admission Procedure: Applications to the nursing program are processed twice a year during specified advertised application periods. At the end of the advertised application period, completed applications with required supporting documents, will be reviewed and considered. Admission testing will be offered to students meeting all admission requirements. Students who meet criteria, meaning score within the state regulation (45th percentile ranking) will be given priority.

NOTE: When admission must be limited because the number of qualified applicants exceeds available space, admission to the program will be given to applicants who scored at or above the 45th percentile ranking, and are also residents of the college service area. If seats are still available applicants who scored at or above the 45th percentile ranking, who live outside of the college service area will be offered admission starting with the higher percentile ranking, until all seats are filled.

Applicants who are not accepted will be eligible to reapply at the next application period, at which time applicants meeting admission requirements will be allowed to repeat the admission

test, and the most recent scores will be used for admission consideration.

Applicants are responsible for making certain that all application materials are on file in the nursing department. The materials needed are:

1. The completed nursing application.
2. Official transcripts of all secondary school work and all prior college work from colleges other than PHCC.

Admission Requirements: The applicant must meet the following requirements for admission to the required nursing clinical courses (NUR 111, 115, 118, 221, 222, 247, 254). Interested students should contact the nursing office for academic advising.

1. Be accepted as a student to the college.
2. Graduation from high school or satisfactory completion of the GED.
3. Complete the college placement test. If scores indicate, the applicant will be required to successfully complete developmental courses before submitting a nursing application.
4. Complete one unit of algebra (if college placement scores indicate content was not retained the course(s) will have to be repeated to included modules 1-6). Students are also required to have two units of high school college prep level science which includes Biology and Chemistry, with no grade below a "C". Deficiencies can be made up through approved developmental or college level courses. Deficiencies must be completed before submitting an application.
5. A cumulative college grade point average of 2.5 or better in all related and general education requirements completed before admission into the nursing program courses.
6. After meeting the above criteria, submit an Application for the Associate Degree Nursing program, during the specified advertised application period, along with required paperwork, i.e. high school transcripts, college transcripts, etc. during the application period.
7. Pre-RN Admission Examination: The Health Education Systems, Inc. (HESI) test or equivalent is the final step in the admission process. Once you have met the above educational criteria and your application file has been approved, you will be scheduled for this test. Applicants must have satisfactory scores in reading, vocabulary, chemistry and mathematics (45th percentile ranking).

Because the nursing program addresses the educational needs of students with a variety of experiences and prior education, a limited number of entering class positions may be designated for experienced Licensed Practical Nurses who graduated from accredited programs or for prospective high school graduates who also have been enrolled at PHCC as part of a nursing department approved program of dual enrollment. Interested high school sophomores should see their counselors in the spring of their sophomore year. Interested high school juniors should see their counselors in the fall of their junior year. All dually enrolled students interested in the PHCC nursing program must have their program of study approved in writing by the PHCC nursing program head.

The typical physical demands of a registered nurse include the following: full range of motion including handling and lifting patients and/or equipment, manual and finger dexterity and eye-

hand coordination. The job generally requires standing and walking for extensive periods of time. The registered nurse should be able to lift and carry items weighing up to 50 pounds. The job settings may have stressful conditions and/or irregular hours. There is a potential for exposure to communicable diseases. After admission to the clinical phase, the prospective student is provided with a Nursing Program Physical Examination form that must be completed by a physician prior to enrolling in nursing classes. Upon admission, all students are required to undergo mandatory drug screening and a criminal background check. Students must have a negative drug screen in order to begin clinical nursing courses.

Please note that the Virginia State Board of Nursing may refuse to admit a candidate to any examination and refuse to issue a license or certificate to any applicant who has been convicted of any felony or any misdemeanor involving moral turpitude. Students must produce a satisfactory criminal background check to the standards of all clinical agencies used by the college for experiential learning prior to enrolling in the Associate Degree Nursing program. Any charges or costs to secure the evaluation will be the responsibility of the student (estimated cost \$50).

The National League for Nursing Accreditation Council is a resource for information regarding the required tuition, fees and length of nursing programs. They can be contacted at:

National League for Nursing Accrediting Commission
3343 Peachtree Road NE, Suite 500
Atlanta, Georgia 30326
1-404-975-5000

Readmission Requirements: Any student wishing to re-enroll in the nursing clinical courses must have at least a 2.5 cumulative grade point average at PHCC to be considered. A student who wishes to re-enter the nursing curriculum must follow the procedure outlined in the Nursing Student Handbook. The student may be required to enroll in and satisfactorily complete specific courses before readmission. Additional data may be required. The nursing faculty will consider each student's application for readmission and the decision to readmit will be based on additional data, prior performance in the nursing program and space availability. Students who fail a nursing course or withdraw for any reason from the Nursing Program may be readmitted to the nursing program only once. All re-admissions are at the discretion of nursing faculty.

Advanced Placement: Licensed Practical Nurses that meet the admission requirements may be eligible for advanced placement. To be considered for advanced placement, an LPN must have:

1. Graduated from an approved practical nursing school.
2. Passed the LPN licensing exam and hold a current license.

LPN's receiving advanced placement will be required to take NUR 115, LPN Transition, (3 credits). Please contact the nursing office for additional information.

Financial Requirements: In addition to the usual college tuition and fees, this program requires additional expenses. Approximate costs include:

Uniforms	\$230
Physical Examination	\$100
Books	\$700-\$1200
Graduation Pin	cost depends on price of gold or silver

AHA BCLS CPR certification	\$127
Drug Screen	\$40-50
Criminal Background Checks	\$50-\$75
Application for Licensure fees	\$390
Transportation to clinical agencies, seminars, etc. as required	

Transfer of Nursing Credit: Students seeking to transfer credit received from nursing courses at other institutions will be considered on an individual basis by the nursing faculty. The student may be asked to provide course descriptions, course syllabi, standardized test scores, and selected data from the course instructor in order to determine placement in the nursing program, subject to availability of space. Since there frequently are differences among nursing programs, students wishing to transfer should be aware that there might be an interruption in program progression.

Curriculum Requirements: In addition to formal lectures and laboratory exercises, selected experiences within driving distance of the college will be scheduled at day, evening and/or weekend times, depending on availability of facilities. Field trips, at an additional cost, may be included.

Clinical nursing students expected to complete end of the semester testing. The results of the end of semester testing will be counted as a percentage of the final course grade. Students must pass the clinical nursing courses to continue in the program. Grading guidelines are specifically addressed in the course syllabi, and Nursing Student Handbook issued upon program admission.

The student must complete all general education and related courses either before or concurrent with nursing program requirements. To remain in the program, a student must have a "C" or above in all nursing courses. Additionally, a grade of "C" or above in all semesters of biology, psychology and health courses is required to continue in the nursing program.

Graduation Requirements: In order to meet PHCC graduation requirements, all degree students must satisfactorily complete Virginia Community College System Core Competency testing standards. Core Competency testing is scheduled during a two week assessment period twice each year, once in October and once in March. Please see your program advisor to determine the best time for you to complete the testing. In order to graduate, students must also be able to demonstrate the college's specified computer competency requirements.

General Education Requirements (18 Credits):

ENG	111-112	College Composition I-II (6)
HLT	230	Principles of Nutrition and Human Development (3)
SOC	200	Principles of Sociology (3) [or PSY 200 Principles of Psychology (3)]
PSY	230	Developmental Psychology (3)
CST	110	Introduction to Communication (3)

Program Requirements (51 Credits):

BIO	231-232	Human Anatomy and Physiology I-II (8)
NUR	111	Nursing I (7)
NUR	118	Fist Level Nursing II (8)
NUR	135	Drug Dosage Calculations (2)
NUR	247	Psychiatric/Mental Health Nursing (3)
NUR	221-222	Second Level Nursing Principles & Concepts I-II (19)

NUR	254	Dimensions of Professional Nursing (2)
SDV	101*	Orientation to Careers (1)
SDV	108	College Survival Skills (1)

Minimum requirement for degree: 69 Credits

*Corequisite with NUR 111

Sample Schedule

Nursing

FIRST YEAR

First Semester

BIO	231	Human Anatomy and Physiology I	4
NUR	135	Drug Dosage Calculations	2
NUR	111	Nursing I	7
PSY	230	Developmental Psychology	3
SDV	108	College Survival Skills	1
SDV	101	Orientation to Careers	<u>1</u>
			18

Second Semester

BIO	232	Human Anatomy and Physiology II	4
NUR	247	Psychiatric/Mental Health Nursing	3
NUR	118	First Level Nursing II	8
SOC	200	Principles of Sociology [or PSY 200]	<u>3</u>
			18

SECOND YEAR

Third Semester

ENG	111	College Composition I	3
HLT	230	Principles of Nutrition & Human Development	3
NUR	221	Second Level Nursing Principles & Concepts I	9
CST	110	Introduction to Communication	<u>3</u>
			18

Fourth Semester

ENG	112	College Composition II	3
NUR	222	Second Level Nursing Principles & Concepts II	10
NUR	254	Dimensions of Professional Nursing	<u>2</u>
			15

Total Semester Hours: 69

Industrial Electronics Technology

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: The focus of this program is to provide highly skilled industrial technicians for a regional workforce. Qualified electronic technicians are needed in ever increasing numbers to assist local business and industry in taking full advantage of computerized systems, automation, and controls. The manufacturing environment of the 21st century integrates several advanced technologies including sensors, transducers, automated controls, programmable logic controls, motor control circuits, motor drives, pneumatics, microprocessors, computer hardware, and software applications. A strong educational background is required to install, maintain, troubleshoot, and repair such advanced systems.

Program Learning Outcomes: The focus of this program is to provide highly skilled industrial technicians. Today's complex, computerized/automated industries demand technicians with knowledge and skills to maintain complex electrical/electronic systems and equipment. Training in the following areas and technologies are included in the Industrial Electronics Technology Program: Sensors and Transducers, Automated Controls, Programmable Logic Controllers (PLCs) Motor Control Circuits, AC and DC Motor Drives, Pneumatics, Microprocessors and Computer Programming, Computer Hardware and Software Applications, Instrumentation, Electronic Data Communication, Systems Troubleshooting and Preventive Maintenance

Occupational Objectives: Employment opportunities for graduates of this program include positions as electronics technician, industrial electronics technician or service technician. Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Curriculum Requirements: The student must satisfactorily complete all general education, program and elective requirements to be awarded the Associate of Applied Science in Industrial Electronics Technology.

Graduation Requirements: In order to meet PHCC graduation requirements, all degree students must satisfactorily complete Virginia Community College System Core Competency testing standards. Core Competency testing is scheduled during a two week assessment period twice each year, once in October and once in March. Please see your program advisor to determine the best time for you to complete the testing.

General Education Requirements (14 Credits):

ENG 111 College Composition I (3)
 MTH 120 Introduction to Mathematics (3)
 CST 110 Introduction to Communication (3)
 Social Science Elective (3)
 Wellness Health, P. E. or recreation courses which promote physical and emotional well-being (2)

Program Requirements (52 Credits):

ELE 216 Industrial Electricity (3)
 ELE 225 Electrical Control Systems (4)
 ELE 143 Programmable Controllers (3)

ELE	144	Programmable Controllers (3) (Pending VCCS Approval)
ETR	100	Electronic Problem Solving Lab (1)
ETR	113-114	D.C. and A.C. Fundamentals I-II (8)
ETR	143-144	Devices and Application I-II (7)
ETR	151	Electronic Circuits and Troubleshooting (2)
ETR	250	Solid State Circuits (4)
ETR	267	Microprocessor Applications I (3)
ETR	282-283	Digital Systems I-II (6)
ETR	299	Supervised Study in Industrial Electronics (1)
INS	210	Principles of Instrumentation (3)
ITE	115	Intro. to Computer Applicat. & Concepts (3)
SDV	108	College Survival Skills (1)

Minimum required for degree: 66 Credits

Sample Schedule

Industrial Electronics Technology

FIRST YEAR

Fall Semester

ENG	111	College Composition I	3
ETR	113	D.C. and A.C. Fundamentals I	4
ETR	143	Devices and Applications I	3
ETR	282	Digital Systems I	3
MTH	120	Introduction to Mathematics	3
SDV	108	College Survival Skills	<u>1</u>
			17

Spring Semester

ETR	114	D.C. and A.C. Fundamentals II	4
ETR	144	Devices and Applications II	4
ETR	283	Digital Systems II	3
ITE	115	Intro. to Computer Applications & Concepts	3
		Wellness Elective	<u>2</u>
			16

SECOND YEAR

Fall Semester

ETR	250	Solid State Circuits	4
ETR	267	Microprocessor Applications I	3
ELE	143	Programmable Controllers I	3
ELE	216	Industrial Electricity	3
		Social Science Elective	3
CST	110	Introduction to Communication	<u>3</u>
			19

Spring Semester

ELE	144	Programmable Controllers II (pending approval)	3
ELE	225	Electrical Control Systems	4
ETR	100	Electronic Problem Solving Lab	1
ETR	151	Electronic Circuits and Troubleshooting	2
INS	210	Principles of Instrumentation	3
ETR	299	Supervised Study in Industrial Electronics	<u>1</u>
			14

Total Semester Hours: 66

Information Systems Technology

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: Individuals who are seeking their first employment or those who wish to qualify for promotion in a present position or to another field, including self-employment, may benefit from this program. Students will learn to use a wide array of business-oriented computer software and choose specific courses to meet career goals. The program provides a base of general skills in information systems and gives the individual the option to specialize in a particular area or complete the degree with a more generalist tract. The program provides base skills in software applications, basic PC troubleshooting and repair, networking terminology, programming concepts, and Internet resources. Upon completion of the program, the student will be prepared for immediate employment.

Occupational Objectives: Completion of this program may lead to employment or career advancement in any of a wide variety of positions such as PC support technician, software specialist, helpdesk technician, or PC advisor. Primary tasks and functions graduates will be able to perform include management of tasks, software operations, and basic problem solving.

Potential Certification: A student may elect to take a certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Office Specialist (MOS) – Access, Excel
- CompTIA - A+, Network+
- Certiport, Inc. - IC3

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses. Students with deficiencies in computer skills or keyboarding will complete additional coursework.

Curriculum Requirements: Students must successfully complete all of the general education and program requirements listed below to be awarded this degree.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.

- Demonstrate the use of logical thinking to make rational decisions in solving computer-related problems and issues.
- Demonstrate a working knowledge of computer programming, networking, hardware, and software.

General Education Requirements (20-21 Credits):

- ENG 111 College Composition I (3)
- ENG 112 College Composition II (3)
- MTH 151 Mathematics for the Liberal Arts I (3)
[or MTH 163 Precalculus I (3)]
- Science Elective [BIO, CHM, ENV, GOL, NAS, PHY] (3-4)
- CST 110 Introduction to Communication (3)
- Social Science Elective [HIS, SOC, PSY, PLS, ECO, GEO] (3)
- Wellness Health, P.E., or recreation courses which promote physical and emotional well-being (2)

Program Requirements (48 Credits):

- CSC 110 Introduction to Computing (3)
- ITD 110 Web Page Design I (3)
- ITD 112 Designing Web Page Graphics (3)
- ITE 115 Intro. to Computer Applications & Concepts (3)
- ITE 119 Information Literacy (3)
- ITE 130 Introduction to Internet Services (3)
- ITE 140 Spreadsheet Software (3)
- ITE 150 Desktop Database Software (3)
- ITE 290 Coordinated Internship (3)
[or ITE 297 Cooperative Education (3)]
- ITE 299 Supervised Study in IST (1)
- ITN 101 Introduction to Network Concepts (3)
- ITN 106 Microcomputer Operating Systems (3)
- ITN 107 Personal Computer Hardware & Troubleshooting (3)
- ITP 110 Visual Basic Programming I (3)
- ITP 160 Intro. to Game Design and Development (3)
- MKT 260 Customer Service Management (3)
- SDV 101 Orientation to Information Systems (1)
- SDV 108 College Survival Skills (1)

Minimum required for degree: 68-69 Credits

Sample Schedule

Information Systems Technology

FIRST YEAR

Fall Semester

CSC	110	Introduction to Computing	3
ENG	111	College Composition I	3
Science Elective			3-4
ITE	115	Intro. to Computer Applications & Concepts	3
MTH	151	Mathematics for the Liberal Arts I [or MTH 163]	3
SDV	101	Orientation to Information Systems	1
SDV	108	College Survival Skills	<u>1</u>
			17-18

Spring Semester

ENG	112	College Composition II	3
ITE	130	Introduction to Internet Services	3
ITE	140	Spreadsheet Software	3
ITN	106	Microcomputer Operating Systems	3
ITE	119	Information Literacy	3
CST	110	Intro. to Communication	<u>3</u>
			18

SECOND YEAR

Fall Semester

ITD	110	Web Page Design I	3
ITE	150	Desktop Database Software	3
ITN	101	Introduction to Network Concepts	3
MKT	260	Customer Service Management	3
Social Science Elective			3
Wellness Elective			<u>2</u>
			17

Spring Semester

ITD	112	Designing Web Page Graphics	3
ITE	290	Coordinated Internship [or ITE 297]	3
ITE	299	Supervised Study in IST	1
ITN	107	Personal Computer Hardware & Troubleshooting	3
ITP	110	Visual Basic Programming I	3
ITP	160	Introduction to Game Design & Development	<u>3</u>
			16

Total Semester Hours: 68-69

Information Systems Technology

Accounting Information Systems Specialization

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: Individuals who are seeking their first employment or those who wish to qualify for promotion in a present position or to another field, including self-employment, may benefit from this program. Students will be provided with technical knowledge and skill in various areas of computerized accounting systems and related information technology topics. This program provides skills to analyze financial reports and solve problems to meet functional objectives of the business related to accounting systems. Upon completion of the program, the student will be prepared for immediate employment.

Occupational Objectives: Completion of this program may lead to employment or career advancement in any of a wide variety of positions such as accounting systems technician, accounts receivable/accounts payable technician, payroll technician, and other positions related to information technology and accounting systems. Primary tasks and functions graduates will be able to perform include the ability to utilize accounting systems in the operation of a business, analyze financial reports, and maintain computerized accounting systems.

Potential Certification: A student may elect to take a certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Office Specialist (MOS) - Excel
- Certiport, Inc. - IC3

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses. Students with deficiencies in computer skills or keyboarding will complete additional coursework.

Curriculum Requirements: Students must successfully complete all of the general education and program requirements listed below to be awarded this degree.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Demonstrate the use of logical thinking to make rational decisions in solving computer-related problems and issues.

- Demonstrate a working knowledge of computer networking, hardware, and software.
- Demonstrate the use of accounting software to generate financial statements and reports to solve business-related problems.
- Apply the principles of financial accounting, managerial accounting, and payroll accounting.

General Education Requirements (20-21 Credits):

ENG 111	College Composition I (3)
ENG 112	College Composition II (3)
MTH 151	Mathematics for the Liberal Arts I (3)
<i>[or MTH 163 Precalculus I (3)]</i>	
Science Elective [BIO, CHM, ENV, GOL, NAS, PHY] (3-4)	
CST 110	Introduction to Communication (3)
Social Science Elective [HIS, SOC, PSY, PLS, ECO, GEO] (3)	
Wellness	Health, P.E., or recreation courses which promote physical and emotional well-being (2)

Program Requirements (48 Credits):

ACC 124	Payroll Accounting (3)
ACC 211	Principles of Accounting I (3)
ACC 212	Principles of Accounting II (3)
ACC 215	Computerized Accounting (3)
CSC 110	Introduction to Computing (3)
ITD 110	Web Page Design I (3)
ITD 112	Designing Web Page Graphics (3)
ITE 115	Intro. to Computer Applications & Concepts (3)
ITE 119	Information Literacy (3)
ITE 140	Spreadsheet Software (3)
ITE 290	Coordinated Internship (3)
<i>[or ITE 297 Cooperative Education (3)]</i>	
ITE 299	Supervised Study in IST (1)
ITN 106	Microcomputer Operating Systems (3)
ITP 110	Visual Basic Programming I (3)
ITP 160	Intro. to Game Design and Development (3)
MKT 260	Customer Service Management (3)
SDV 101	Orientation to Information Systems (1)
SDV 108	College Survival Skills (1)

Minimum required for degree: 68-69 Credits

Sample Schedule

Accounting Information Systems

FIRST YEAR

Fall Semester

ACC 211	Principles of Accounting I	3
CSC 110	Introduction to Computing	3
ENG 111	College Composition I	3
ITE 115	Intro. to Computer Applications & Concepts	3
MTH 151	Mathematics for the Liberal Arts I [or MTH 163]	3
SDV 101	Orientation to Information Systems	1
SDV 108	College Survival Skills	<u>1</u>
		17

Spring Semester

ACC 212	Principles of Accounting II	3
ENG 112	College Composition II	3
ITE 119	Information Literacy	3
ITE 140	Spreadsheet Software	3
ITN 106	Microcomputer Operating Systems	3
CST 110	Intro. to Speech Communication	<u>3</u>
		18

SECOND YEAR

Fall Semester

ACC 215	Computerized Accounting	3
ITD 110	Web Page Design I	3
MKT 260	Customer Service Management	3
Science Elective		3-4
Social Science Elective		3
Wellness Elective		<u>2</u>
		17-18

Spring Semester

ACC 124	Payroll Accounting	3
ITD 112	Designing Web Page Graphics	3
ITE 290	Coordinated Internship <i>[or ITE 297]</i>	3
ITE 299	Supervised Study in IST	1
ITP 110	Visual Basic Programming I	3
ITP 160	Introduction to Game Design & Development	<u>3</u>
		16

Total Semester Hours: 68-69

Information Systems Technology

Game Design and Development Specialization

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: Individuals who are seeking their first employment or those who wish to qualify for promotion in a present position or to another field, including self-employment, may benefit from this program. Students will be provided a broad background in game and simulation development, with practical applications in creative arts, audio/video technology, creative writing, modeling, design, and programming. Upon completion of the program, the student will be prepared for immediate employment.

Occupational Objectives: Completion of this program may lead to employment or career advancement in any of a wide variety of positions such as game and simulation technician, art/animation specialist, game/simulation designer, testers, programmers, and audio/video specialist. Primary tasks and functions graduates will be able to perform include the design and development of programs related to game and simulation in such industries as health care, forensics, education, entertainment, engineering, and government.

Potential Certification: A student may elect to take a certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Certified Solution Developer (MCSD) – Visual Basic, C++
- Certiport, Inc. - IC3

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses. Students with deficiencies in computer skills or keyboarding will complete additional coursework.

Curriculum Requirements: Students must successfully complete all of the general education and program requirements listed below to be awarded this degree.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Demonstrate the use of logical thinking to make rational decisions in solving computer-related problems and issues.
- Demonstrate a working knowledge of various computer programming languages.

- Work as a part of a team to develop and design software applications and graphics related to the game and simulation industry.
- Demonstrate principles of quality customer service.

General Education Requirements (20-21 Credits):

ENG 111	College Composition I (3)
ENG 112	College Composition II (3)
MTH 151	Mathematics for the Liberal Arts I (3)
[or MTH 163	Precalculus I (3)]
Science Elective	[BIO, CHM, ENV, GOL, NAS, PHY] (3-4)
CST 110	Introduction to Communication (3)
Social Science Elective	[HIS, SOC, PSY, PLS, ECO, GEO] (3)
Wellness	Health, P.E., or recreation courses which promote physical and emotional well-being (2)

Program Requirements (45 Credits):

ART 121	Drawing I (3)
CAD 238	Computer Aided Modeling 1 (3)
CAD 241	Parametric Solid Modeling 1 (3)
CSC 110	Introduction to Computing (3)
CSC 201	Computer Science I (4)
ITD 110	Web Page Design I (3)
ITD 112	Designing Web Page Graphics (3)
ITE 115	Intro. to Computer Applications & Concepts (3)
[or ITE 119	Information Literacy (3)]
ITE 290	Coordinated Internship (3)
[or ITE 297	Cooperative Education (3)]
ITE 299	Supervised Study in IST (1)
ITN 106	Microcomputer Operating Systems (3)
ITP 110	Visual Basic Programming I (3)
ITP 120	Java Programming I (3)
ITP 132	C++ Programming I (3)
ITP 160	Intro. to Game Design and Development (3)
MKT 260	Customer Service Management (3)
[or ACC 211 or BUS 165(3)]	
SDV 101	Orientation to Information Systems (1)
SDV 108	College Survival Skills (1)

Minimum required for degree: 65-66 Credits

Sample Schedule

Game Design and Development

FIRST YEAR

Fall Semester

CAD	238	Computer Aided Modeling 1	3
CSC	110	Introduction to Computing	3
ENG	111	College Composition I	3
ITE	115	Intro. to Computer Applications & Concepts <i>or ITE 119</i>	3
MTH	151	Mathematics for the Liberal Arts I <i>[or MTH 163]</i>	3
SDV	108	College Survival Skills	<u>1</u>

Spring Semester

CAD	241	Parametric Solid Modeling I	3
ENG	112	College Composition II	3
ITN	106	Microcomputer Operating Systems	3
ITP	110	Visual Basic Programming I	3
ITP	160	Introduction to Game Design & Development	3
CST	110	Intro. to Communication	<u>3</u>

SECOND YEAR

Fall Semester

Art	121	Drawing I	3
ITD	110	Web Page Design I	3
ITP	132	C++ Programming	3
MKT	260	Customer Service Management <i>or ACC 211 or BUS 165</i>	3
Science Elective			<u>3-4</u>

Spring Semester

SDV	101	Orientation to Information Systems	1
ITD	112	Designing Web Page Graphics	3
ITE	290	Coordinated Internship <i>[or ITE 297]</i>	3
ITE	299	Supervised Study in IST	1
ITP	120	Java Programming I	3
Social Science Elective			3
Wellness Elective			<u>2</u>

Total Semester Hours: 65-66

Information Systems Technology

Internet Services Specialization

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: Individuals seeking their first employment or who wish to qualify for promotion in a present position or to another field, including self-employment, may benefit from this program. Students will be provided with technical knowledge and skill in Web page design, Internet programming, Internet database design, and related topics. This program provides skills to develop and design Web pages, use programming languages to develop Web pages, and be familiar with Internet protocols, security, and applications.

Occupational Objectives: Completion of this program may lead to employment or career advancement in any of a wide variety of positions such as Web page designer, Internet programmer, Web site manager, or Web author. Primary tasks and functions graduates will be able to perform include the ability to analyze and design Web pages using Internet programming languages, test and implement programs on the Web, develop Web pages, develop Internet databases, and manage the technical duties related to Internet services.

Potential Certification: A student may elect to take a certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Office Specialist (MOS) - Access
- CompTIA - A+, Network+
- Certified Internet Webmaster (CIW) – CIW Associate
- Certiport, Inc. - IC3

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses. Students with deficiencies in computer skills or keyboarding will complete additional coursework.

Curriculum Requirements: Students must successfully complete all of the general education and program requirements listed below to be awarded this degree.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective verbal and written communication skills.
- Apply mathematical and scientific reasoning skills to formulate and solve problems.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate proficiency in information literacy.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate proficiency in oral communication methods.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Demonstrate the use of logical thinking to make rational decisions in solving computer-related problems and issues.

- Demonstrate a working knowledge of computer networking, hardware, and software.
- Demonstrate web design skills to create web pages.
- Use web development and database skills to query, store, and retrieve data.
- Design functional e-commerce web sites using an appropriate computer language.

General Education Requirements (20-21 Credits):

ENG 111	College Composition I (3)
ENG 112	College Composition II (3)
MTH 151	Mathematics for the Liberal Arts I (3) <i>[or MTH 163 Precalculus I (3)]</i>
Science Elective	[BIO, CHM, ENV, GOL, NAS, PHY] (3)
CST 110	Introduction to Communication (3)
Social Science Elective	[HIS, SOC, PSY, PLS, ECO, GEO] (3)
Wellness	Health, P.E., or recreation courses which promote physical and emotional well-being (2)

Program Requirements (48 Credits):

CSC 110	Introduction to Computing (3)
ITD 110	Web Page Design I (3)
ITD 112	Designing Web Page Graphics (3)
ITD 210	Web Page Design II (3)
ITE 115	Intro. to Computer Applications & Concepts (3)
ITE 119	Information Literacy (3)
ITE 130	Introduction to Internet Services (3)
ITE 150	Desktop Database Software (3)
ITE 290	Coordinated Internship (3) <i>[or ITE 297 Cooperative Education (3)]</i>
ITE 299	Supervised Study in IST (1)
ITN 101	Introduction to Network Concepts (3)
ITN 106	Microcomputer Operating Systems (3)
ITP 120	Java Programming I (3)
ITP 136	C# Programming (3)
ITP 160	Intro. to Game Design and Development (3)
MKT 260	Customer Service Management (3)
SDV 101	Orientation to Information Systems (1)
SDV 108	College Survival Skills (1)

Minimum required for degree: 68-69 Credits

Sample Schedule

Internet Services

FIRST YEAR

Fall Semester

CSC 110	Introduction to Computing	3
ENG 111	English Composition I	3
ITE 115	Intro. to Computer Applications & Concepts	3
MTH 151	Mathematics for the Liberal Arts I [or MTH 163]	3
Science Elective		3-4
SDV 101	Orientation to Information Systems	1
SDV 108	College Survival Skills	<u>1</u>
		17-18

Spring Semester

ENG 112	College Composition II	3
ITE 130	Introduction to Internet Services	3
ITN 106	Microcomputer Operating Systems	3
ITN 101	Introduction to Network Concepts	3
ITP 160	Introduction to Game Design & Development	3
CST 110	Intro. to Communication	<u>3</u>
		18

SECOND YEAR

Fall Semester

ITE 150	Desktop Database Software	3
ITD 110	Web Page Design I	3
ITP 136	C# Programming	3
MKT 260	Customer Service Management	3
Social Science Elective		3
Wellness Elective		<u>2</u>
		17

Spring Semester

ITD 112	Designing Web Page Graphics	3
ITD 210	Web Page Design II	3
ITE 119	Information Literacy	3
ITE 290	Coordinated Internship <i>[or ITE 297]</i>	3
ITE 299	Supervised Study in IST	1
ITP 120	Java Programming I	<u>3</u>
		16

Total Semester Hours: 68-69

Legal Assisting

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: The curriculum provides knowledge and skills leading to immediate employment in the field of paraprofessionals in the legal setting.

Program Learning Outcomes: The program prepares graduates to work as paraprofessionals in a variety of legal, business and industry, and governmental environments that require legal knowledge and specialized skills.

Occupational Objectives: A graduate of this program may work as a paralegal or legal assistant in law offices, law enforcement agencies, court systems, municipal offices, corporate office - contract/legal department, banks, real estate offices, insurance agencies, and contracting agencies.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses.

Program Requirements: Developmental requirements must be satisfied prior to enrolling in LGL 115.

Curriculum Requirements: The student must satisfactorily complete requirements listed below to receive this degree. Graduation Requirements: In order to meet PHCC graduation requirements, all degree students must satisfactorily complete Virginia Community College System Core Competency testing standards. Core Competency testing is scheduled during a two week assessment period twice each year, once in October and once in March. Please see your program advisor to determine the best time for you to complete the testing.

General Education Requirements (20 Credits):

ENG 111-112 College Composition I-II (6)
 HLT-PED Health/Physical Education Elective(s) (2)
 MTH 120 Introduction to Mathematics (3)
 PLS 211 U. S. Government I (3)
 CST 110 Introduction to Communication (3)
 Social Science Elective (3)

Program Requirements (48 Credits):

ADJ 130 Introduction to Criminal Law (3)
 BUS 125 Applied Business Mathematics (3)
 ITE 115 Intro. to Computer Applications & Concepts (3)
 LGL 110 Introduction to Law and the Legal Assistant (3)
 LGL 115 Real Estate Law for Legal Assistants (3)
 LGL 117 Family Law (3)
 LGL 125 Legal Research (3)
 LGL 126 Legal Writing (3)
 LGL 200 Ethics for the Legal Assistant (1)
 LGL 215 Torts (3)
 LGL 219 Basics of Litigation Support (3)
 LGL 225 Estate Planning and Probate (3)
 LGL 226 Real Estate Abstracting (3)
 LGL 230 Legal Transactions (3)

LGL 290 Coordinated Internship (2)
 LGL 299 Supervised Study in Legal Assisting (1)
 SDV 101 Orientation to Legal Assisting (1)
 SDV 108 College Survival Skills (1)
 ELECTIVES (3 CREDITS)
 [Selected from ADJ, AST, IST, or advisor approval]

Minimum required for degree: 68 Credits

Sample Schedule

Legal Assisting

FIRST YEAR

Fall Semester

ENG 111	College Composition I	3
ITE 115	Intro. to Computer Applications & Concepts	3
LGL 110	Introduction to Law and the Legal Assistant	3
LGL 125	Legal Research	3
LGL 200	Ethics for the Legal Assistant	1
MTH 120	Introduction to Mathematics	3
SDV 101	Introduction to Legal Assisting	1
SDV 108	College Survival Skills	<u>1</u>
		18

Spring Semester

BUS 125	Applied Business Mathematics	3
ENG 112	College Composition II	3
LGL 126	Legal Writing	3
LGL 215	Torts	3
CST 110	Introduction to Communication	3
	Social Science Elective	<u>3</u>
		18

SECOND YEAR

Fall Semester

HLT -PED	Health/Physical Education Elective(s)	2
LGL 115	Real Estate Law for Legal Assistants	3
LGL 117	Family Law	3
LGL 230	Legal Transactions	3
PLS 211	U.S. Government I	3
	Elective	<u>3</u>
		17

Spring Semester

ADJ 130	Introduction to Criminal Law	3
LGL 219	Basics of Litigation Support	3
LGL 225	Estate Planning and Probate	3
LGL 226	Real Estate Abstracting	3
LGL 290	Coordinated Internship	2
LGL 299	Supervised Study in Legal Assisting	<u>1</u>
		15

Total Semester Hours: 68

Technical Studies

Agribusiness

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: To provide a response to current and anticipated workforce shortage in the agribusiness industry. Individuals who are interested in owning or seeking employment in managing an agribusiness, farm, nursery, greenhouse, or other related fields may benefit from this program. The Agribusiness program will prepare the student to enter the rapidly changing areas of agricultural business and the challenges that are currently facing today's agricultural industry. Agriculture is facing a period of change trying to compete in today's world markets and to provide food for the growing world's populations.

Program Learning Outcomes: Graduates of the Agribusiness Program will be prepared to meet today's rapidly changing Agricultural Industry by studying the operation of both plant and animal enterprises. A student will be able to:

- Demonstrate knowledge of agricultural finance and how it affects specific agricultural operations.
- Demonstrate human resources management to effectively operate an agricultural enterprise and the associated service industries.
- Demonstrate skills needed to market agriculture commodities and services.
- Demonstrate knowledge of ag chemical uses and how to effectively use them with minimal effects on the environment.
- Demonstrate knowledge of agriculture products used in the production of biofuels and other energy resources.
- Demonstrate effective critical thinking skills to solve problems facing agricultural industry.
- Demonstrate proficiency in the use of oral communication, technology, math and reasoning skills.
- Apply a specialized area of agricultural production that meets industry and student needs.
- Demonstrate acceptable ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.

Occupational Objectives: Careers are available for students interested in farm management, nurseries, greenhouse, biofuels, and the farm service industry. Graduates will have prepared themselves to compete for more than 50,000 Agricultural jobs that have been estimated to be available in the period between 2005 and 2010 by the Department of Agriculture. Agribusiness Degree graduates are in great demand receiving salaries equal to or greater than those with higher degrees and our graduates will be able to meet a portion of that demand.

General Education Requirements (17 Credits):

ENG 111 College Composition I (3)

[or ENG 131 Technical Writing (3)]

HUM 165 Controversial Issues in Contemporary American Culture (3)

ECO 201 Principles of Macroeconomics (3)

SOC 200 Principles of Sociology (3)

[or PSY 200 Principles of Psychology (3)]

[or ECO 202 Principles of Microeconomics (3)]

CST 110 Introduction to Communication (3)

Wellness Health, P.E., or recreation courses which promote physical and emotional well being (2)

Program Requirements (49 Credits):

AGR 141 Introduction to Animal Science and Technology (4)

AGR 142 Introduction to Plant Science and Technology (3)

AGR 143 Introduction to Agribusiness and Financial Management (3)

AGR 144 Agricultural Human Resource Management (3)

AGR 205 Soil Fertility and Management (3)

AGR 231 Agribusiness Marketing Risk Management, and Entrepreneurship (3)

AGR 232 Professional Selling for Agribusiness (3)

AGR 233 Food Production, Safety, Biosecurity, and Quality Control (3)

AGR 234 Chemical Applications and Pest Management (3)

AGR 297 Cooperative Education (6)

AGR 299 Supervised Study in AGR (1)

AGR Electives (6)

ITE 115 Intro. to Computer Applications & Concepts (3)

SDV 101 Orientation to Agribusiness (1)

SDV 108 College Survival Skills (1)

Technical Elective [choose from ACC 211, CAD 200, or ITD 110] (3)

Minimum required for degree: 66 Credits

Sample Schedule

Agribusiness

FIRST YEAR

Fall Semester

AGR 141	Intr. to Animal Science and Technology	4
AGR 142	Intro. to Plant Science and Technology	3
CST 110	Introduction to Communication	3
ENG 111	College Composition I	3
ITE 115	Intro. to Computer Applications & Concepts	3
SDV 101	Orientation to Agribusiness	1
SDV 108	College Survival Skills	<u>1</u>
		18

Spring Semester

AGR 144	Agricultural Human Resource Management	3
AGR 233	Food Production, Safety, Biosecurity, and Quality Control	3
AGR 232	Professional Selling for Agribusiness	3
ECO 201	Principles of Macroeconomics	3
HUM 165	Controversial Issues in Contemporary American Culture	<u>3</u>
		15

SECOND YEAR

Fall Semester

AGR 143	Introduction to Agribusiness and Financial Management	3
AGR 205	Soil Fertility and Management	3
AGR 197	Cooperative Education	3
PED/HLT	Elective	2
SOC 200	Principles of Sociology	3
Technical Elective		<u>3</u>
		17

Spring Semester

AGR 231	Agribusiness Marketing Risk Management, and Entrepreneurship	3
AGR 234	Chemical Applications and Pest Management	3
AGR 199	Supervised Study in AGR	1
AGR 297	Cooperative Education	3
AGR Electives		<u>6</u>
		16

Total Semester Hours: 66

Technical Studies

Motorsports Technology

Award: Associate of Applied Science

Length: 4 Semesters

Purpose: To provide a rapid response to an anticipated workforce shortage for the motorsports industry within the mid-Atlantic region. The student will be engaged in mastering the academic and technical skill sets required for employment.

Program Learning Outcomes: A student will be able to:

- Demonstrate knowledge about auto racing and race vehicles, their characteristics, specifications, rules, regulations, systems, current technology, and testing methods.
- Demonstrate critical thinking skills and the ability to apply mathematical and scientific knowledge and reasoning skills in solving technical problems.
- Demonstrate knowledge about components, systems, configuration, classification, terminology, and principles of functioning of high performance engines used in race competitions.
- Demonstrate the ability to assemble, test, and apply corrective methods to resolve technical issues related to maximum power performance of race engines using codes and specifications.
- Demonstrate the knowledge of aerodynamics, stability, and control of race vehicles, and the ability to design, model, and fabricate structures and bodies of race vehicles using blueprints and safety specifications.
- Demonstrate knowledge of engineering materials, manufacturing processes, and testing techniques, and skill to conceive fabricate and/or assemble suspension, traction, steering and braking systems of race vehicles.
- Demonstrate understanding and application of information technology and general business knowledge, and their applicability to the motorsports industry.
- Describe contemporary approaches to management and demonstrate management and marketing skills relevant to the motorsports industry
- Demonstrate effective verbal, oral and written communication skills applicable in a business setting.
- Demonstrate acceptable ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork

Occupational Objectives: Employment opportunities for graduates of this program include chassis technician, set-up assistant, crew member, block assembly assistant, engine builder, or engine machine technician in racing environments.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills and/or fundamental Motorsports terminology will complete additional coursework. Students may be required to complete a Motorsports Program Application and interview. Tools for the program are required.

Curriculum Requirements: The student must satisfactorily complete all general education, program and elective requirements to receive this degree. Student must maintain a 2.5 curricular grade point average to stay in program.

Graduation Requirements: In order to meet PHCC graduation requirements, all degree students must satisfactorily complete Virginia Community College System Core Competency testing standards. Core Competency testing is scheduled during a two week assessment period twice each year, once in October and once in March. Please see your program advisor to determine the best time for you to complete the testing.

General Education Requirements (16 Credits):

ENG 111	College Composition I (3)
MTH 103	Applied Technical Mathematics I (3)
[or MTH 151	Math for Liberal Arts I (3)]
PHY 131	Applied Physics I (3)
CST 110	Introduction to Communication (3)
PED/HLT	Elective (1)
Social Science Elective	(3)

Program Requirements (53 Credits):

ITE 115	Intro. to Computer Applications & Concepts (3)
MTS 126	Motorsports Technology II (3)
MTS 130	Motorsports Structural Technology I (3)
MTS 131	Motorsports Structural Technology II (3)
MTS 132	Motorsports Structural Technology III (3)
MTS 135	Sheet Metal Fabrication (3)
MTS 140	Stock Car Engines I (3)
MTS 150	Engine Machining Processes I (4)
MTS 195	High Performance Engine Induction Systems (3)
MTS 210	Race Car Setup I (3)
MTS 211	Race Car Setup II (3)
MTS 240	Stock Car Engines II (3)
MTS 250	Engine Machining Processes II (3)
MTS 290	Coordinated Internship (2)
MTS 295	Machining and Welding (3)
MTS 295	Introduction to Pit Stop (2)
MTS 298	Dyno Engine Performance (3)
MTS 299	Supervised Study in Motorsports (1)
SDV 101	Introduction to Motorsports (1)
SDV 108	College Survival Skills (1)

Minimum required for degree: 69 credits

Sample Schedule

Motorsports Technology

FIRST YEAR

Fall Semester

ENG 111	College Composition I	3
MTH 103	Applied Technical Mathematics I	3
MTS 130	Motorsports Structural Technology I	3
MTS 210	Race Car Setup I	3
MTS 295	Machining and Welding	3
SDV 101	Introduction to Motorsports	1
SDV 108	College Survival Skills	<u>1</u>
		17

Spring Semester

CST 110	Introduction to Communication	3
ITE 115	Intro. To Computer Applications & Concepts	3
MTS 131	Motorsports Structural Technology II	3
MTS 132	Motorsports Structural Technology III	3
MTS 135	Sheet Metal Fabrication	3
MTS 211	Race Car Setup II	<u>3</u>
		18

SECOND YEAR

Fall Semester

MTS 126	Motorsports Technology II	3
MTS 140	Stock Car Engines I	3
MTS 150	Engine Machining Process I	4
MTS 195	High Performance Engine Induction Systems	3
PHY 131	Applied Physics I	<u>3</u>
		16

Spring Semester

MTS 240	Stock Car Engines II	3
MTS 250	Engine Machining Process II	3
MTS 290	Coordinated Internship	2
MTS 298	Dyno Engine Performance	3
MTS 295	Introduction to Pit Stop	2
MTS 299	Supervised Study in Motorsports	1
PED/HLT	Elective	1
Social Science Elective		<u>3</u>
		18

Total Semester Hours: 69

Certificates

Automotive Technology

Bookkeeping

Clerical Studies

Computer Aided Drafting & Design

Early Childhood Education

General Business

General Education

Heating, Ventilation, Air Conditioning &
Refrigeration

Health Sciences

Industrial Welding

Practical Nursing

Therapeutic Massage

Certificate programs can usually be completed in one year of full-time enrollment and offer specific general education along with key skill area courses. Certificate programs are often equal to the first year of a corresponding associate degree.

Automotive Technology

Award: Certificate
Length: 3 semesters

Purpose: This program has a dual purpose for workforce development of the region. 1) This program provides students basic knowledge and skills for transfer into the PHCC Motorsports Technology program. 2) This program also provides entry level skills and knowledge for employment in Automotive Industry and advanced skills for individuals currently employed in the field.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. (See Automotive Technology Advisor prior to enrollment)

Curriculum Requirements: The student must satisfactorily complete all general education, program and elective requirement listed below to receive a Certificate in Automotive Technology.

Industry Certification: A program graduate will be prepared for the ASE examination and certification.

General Education Requirements (9 Credits):

ENG 131 Technical Report Writing I (3)
[or ENG 111 College Composition I (3)]
MTH 120 Introduction to Mathematics (3)
ITE 115 Intro. to Computer Applications & Concepts (3)

Program Requirements (39 Credits):

AUT 111 Automotive Engines I (3)
AUT 121 Automotive Fuel systems I (3)
AUT 125 Anti-Pollution Systems (3)
AUT 161-162 Automotive Diagnosis I & II (6)
AUT 165 Auto Diagnosis and Tune-Up (2)
AUT 190 Coordinated Internship (1)
AUT 215 Emissions Systems Diagnosis and Repair(2)
AUT 236 Automotive Climate Control (4)
AUT 241 Automotive Electricity I (3)
AUT 245 Automotive Electronics (3)
AUT 265 Automotive Braking System (3)
AUT 266 Auto Alignment, Suspension & Steering (3)
AUT 275 Shop Management (2)
SDV 108 College Survival Skills (1)

Minimum required for certificate: 48 credits

Sample Schedule

Automotive Technology

First Semester

ENG	131	Technical Report Writing I (or ENG 111)	3
MTH	120	Introduction to Mathematics	3
AUT	111	Automotive Engines I	3
AUT	121	Automotive Fuel Systems I	3
AUT	265	Automotive Braking Systems	3
SDV	108	College Survival Skills	<u>1</u>
			16

Second Semester

AUT	125	Anti-Pollution Systems	3
AUT	161	Automotive Diagnosis I	3
AUT	215	Emission Systems Diagnosis & Repair	2
AUT	236	Automotive Climate Control	4
AUT	241	Automotive Electricity I	3
AUT	275	Shop Management	<u>2</u>
			17

Third Semester

AUT	162	Automotive Diagnosis II	3
AUT	165	Auto Diagnosis and Tune-Up	2
AUT	245	Automotive Electronics	3
AUT	266	Auto alignment, Suspension & Steering	3
AUT	190	Coordinated Internship	1
ITE	115	Intro. to Computer Applications & Concepts	<u>3</u>
			15

Total Semester Hours: 48

Bookkeeping

Award: Certificate

Length: 2 Semesters

Purpose: The purpose of this program is to provide additional knowledge and skill in basic accounting and bookkeeping for persons seeking immediate employment in the field, for those already employed who want to upgrade skills or for small business owners.

Occupational Objectives: Employment opportunities might include accountant's assistant, bookkeeper, financial records manager, office manager or small business operator.

Potential Certification: A student may elect to take an industry-specific certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examinations:

- Microsoft Office Specialist (MOS) - Excel

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Curriculum Requirements: Students must successfully complete all of the general education, program and elective requirements listed below to be awarded this certificate.

Program Learning Outcomes: A student will be able to:

- Demonstrate ability to reason critically and problem-solve.
- Describe and use general business knowledge and skills.
- Apply the principles of financial accounting, managerial accounting, tax accounting, and payroll accounting.
- Prepare and interpret financial statements.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate effective written communication skills in a business setting.

General Education Requirements (6 Credits):

ENG 111 College Composition I (3)
MTH 120 Introduction to Mathematics (3)

Program Requirements (29 Credits):

ACC 124 Payroll Accounting (3)
ACC 211-212 Principles of Accounting I-II (6)
ACC 215 Computerized Accounting (3)
ACC 261 Principles of Federal Taxation I (3)
BUS 100 Introduction to Business (3)
BUS 125 Applied Business Mathematics (3)
ITE 115 Intro. to Computer Applications & Concepts (3)

ITE 140 Spreadsheet Software (3)
SDV 108 College Survival Skills (1)

Minimum required for certificate: 34 Credits

Sample Schedule

Bookkeeping

Fall Semester

ACC 211	Principles of Accounting I	3
BUS 100	Introduction to Business	3
ENG 111	College Composition I	3
ITE 115	Intro. to Computer Applications & Concepts	3
MTH 120	Introduction to Mathematics	3
SDV 108	College Survival Skills	<u>1</u>
		16

Spring Semester

ACC 124	Payroll Accounting	3
ACC 212	Principles of Accounting II	3
ACC 215	Computerized Accounting	3
ACC 261	Principles of Federal Taxation I	3
BUS 125	Applied Business Mathematics	3
ITE 140	Spreadsheet Software	<u>3</u>
		18

Total Semester Hours: 34

Clerical Studies

Award: Certificate
Length: 3 Semesters

Purpose: To provide competent entry-level office support personnel for immediate employment in business, industry, the professions, and government.

Occupational Objectives: Completion of this program may lead to employment or career advancement in any of a wide variety of positions such as clerk typist, data entry keyer, file clerk, general clerk, clerk stenographer, shipping/receiving clerk, bank teller, information clerk, and switchboard operator/ receptionist.

Potential Certification: A student may elect to take an industry-specific certification exam. The examinations generally require a testing fee paid by the student. After completion of this program, a student will be academically prepared to take the following examination:

- Microsoft Office Specialist (MOS) – Word, Excel, Access, PowerPoint

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills or keyboarding will complete additional coursework.

Curriculum Requirements: The student must satisfactorily complete all general education, program and elective requirements listed below to receive a Certificate in Clerical Studies.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective written communication skills in a business setting.
- Produce a variety of business documents using correct grammar, punctuation and spelling in a form acceptable in today's business environment.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate various methods of filing in storing and retrieving documents both manually and electronically.

General Education Requirements (6 Credits):

ENG 111 College Composition I (3)
MTH 120 Introduction to Mathematics (3)

Program Requirements (35 Credits):

ACC 124 Payroll Accounting (3)
[or SPA 103 Basic Spoken Spanish I (3)]
AST 101 Keyboarding I (3)
AST 102 Keyboarding II (3)
AST 113 Keyboarding for Speed and Accuracy (1)
[or AST 154 Intro. to Voice Recognition Software (1)]
AST 141 Word Processing I (Word 2007) (3)
AST 234 Records and Database Management (3)
AST 238 Word Processing Advanced Operations (3)

AST 243 Office Administration I (3)
[or elective approved by faculty advisor or division dean]
AST 260 Presentation Software (PowerPoint 2007) (3)
BUS 125 Applied Business Mathematics (3)
ITE 115 Intro. to Computer Applications & Concepts (3)
ITE 140 Spreadsheet Software (3)
SDV 108 College Survival Skills (1)

Minimum required for certificate: 41 credits

Sample Schedule

Clerical Studies

Fall Semester

ACC 124	Payroll Accounting <i>[or SPA 103]</i>	3
AST 101	Keyboarding I	3
ENG 111	College Composition I	3
ITE 115	Intro. to Computer Applications & Concepts	3
MTH 120	Introduction to Mathematics	3
SDV 108	College Survival Skills	<u>1</u>
		16

Spring Semester

AST 102	Keyboarding II	3
AST 141	Word Processing I	3
AST 234	Records and Database Management	3
AST 260	Presentation Software	3
BUS 125	Applied Business Mathematics	<u>3</u>
		15

Summer Semester

AST 113	Keyboarding for Speed and Accuracy <i>or AST 154</i>	1
AST 238	Word Processing Advanced Operations	3
AST 243	Office Administration I <i>[or Approved Elective]</i>	3
ITE 140	Spreadsheet Software	<u>3</u>
		10

Total Semester Hours: 41

Computer Aided Drafting & Design

Award: Certificate
Length: 3 Semesters

Purpose: Students will learn to use advanced computer workstations with various CADD software applications. Students will receive instruction and practice in the planning, design, and preparation of high quality technical drawings for a variety of projects. In addition to technical courses, there are supporting courses in communications, mathematics, and social science. These courses serve to broaden the student's general education background and thus better prepare students for employment and advancement in the career field.

Program Learning Outcomes: Program graduates have generic and specific occupational skills to be competitive in technical drawing creation and manipulation positions (CADD positions) in a variety of manufacturing, engineering, architectural and civil settings. Graduates demonstrate proficiency in 21st Century skills and use of current technological tools of the profession.

Occupational Objectives: Graduates may seek immediate employment or continue their education in the General Engineering Technology Degree program at PHCC. The curriculum is designed to provide educational background and skills training that would be required for students seeking employment in entry level architectural and industrial drafting such as architectural drafting technician, engineering drafting technician, engineering assistant, CAD operator or CAD drafter.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Curriculum Requirements: The students must satisfactorily complete all requirements listed below to receive this certificate

General Education Requirements (6 Credits):

ENG 131 Technical Report Writing I (3)
[or ENG 111 College Composition I (3)]
MTH 120 Introduction to Mathematics (3)

Program Requirements (33 Credits):

CAD 111 Technical Drafting (3)
CAD 200 Survey of Computer Aided Drafting (3)
CAD 202 Computer Aided Drafting and Design II (3)
CAD 203 Computer Aided Drafting and Design III (3)
CAD 226 Computer Aided Machining (3)
CAD 232 Computer Aided Drafting II (3)
CAD 233 Computer Aided Drafting III (3)
CAD 241 Parametric Modeling I (3)
CAD 242 Parametric Modeling II (3)

CAD 280 Design Capstone Project (2)
ITE 115 Intro. to Computer Applications & Concepts (3)
SDV 108 College Survival Skills (1)

Minimum required for certificate: 39 credits

Sample Schedule

Computer Aided Drafting & Design

First Semester

CAD 111	Technical Drafting I	3
CAD 200	Survey of Computer Aided Drafting	3
ENG 131	Technical Report Writing I (or ENG 111)	3
ITE 115	Intro. to Computer Applications & Concepts	3
SDV 108	College Survival Skills	<u>1</u>
		13

Second Semester

MTH 120	Introduction to Mathematics	3
CAD 202	Computer Aided Drafting and Design II	3
CAD 226	Computer Aided Machining	3
CAD 232	Computer Aided Drafting II	3
CAD 241	Parametric Modeling I	<u>3</u>
		15

Third Semester

CAD 203	Computer Aided Drafting and Design III	3
CAD 233	Computer Aided Drafting III	3
CAD 242	Parametric Modeling II	3
CAD 280	Design Capstone Project	<u>2</u>
		11

Total Semester Credit Hours 39

Early Childhood Education

Award: Certificate
Length: 3 Semesters

Purpose: The curriculum is designed to train individuals in childcare and upgrade skills of those serving in a similar capacity.

Program Learning Outcomes: The graduate of the program will be qualified to serve as a director/administrator or a lead teacher in a licensed child care center, early learning center, or family day home in the state of Virginia.

Occupational Objectives: Graduates may qualify for a position as a day care provider, teacher's aide in preschool programs, home care providers, and licensed day care administrators.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses.

Curriculum Requirements: Students must satisfactorily complete each of the requirements listed below to receive a Certificate in Early Childhood Education.

General Education Requirements (15 Credits):

ENG	111	College Composition I (3)
PSY	135	Child Care Psychology (3)
HLT	100	First Aid & Cardiopulmonary Resuscitation (3)
MTH	120	Introduction to Mathematics (3)
ITE	115	Intro. to Computer Applications & Concepts (3)

Program Requirements (22 Credits):

CHD	118	Methods & Materials Language Arts for Children (3)
CHD	120	Introduction to Early Childhood Education (3)
CHD	125	Creative Activities for Children (3)
CHD	126	Developing Science & Math Concepts for Children (3)
CHD	205	Guiding the Behavior of Children (3)
CHD	265	Advanced Observation & Participation in an Early Childhood Setting (3)
HLT	135	Child Health and Nutrition (3)
SDV	108	College Survival Skills (1)

Minimum required for certificate: 37 Credits

Sample Schedule

Early Childhood Education

First Semester

CHD	118	Methods & Materials in the Language Arts for Children	3
CHD	120	Introduction to Early Childhood Education	3
ENG	111	College Composition I	3
ITE	115	Intro. to Computer Applications & Concepts	3
PSY	135	Child Care Psychology	3
SDV	108	College Survival Skills	<u>1</u>
			16

Second Semester

CHD	125	Creative Activities for Children	3
CHD	126	Developing Science & Math Concepts for Children	3
CHD	205	Guiding the Behavior of Children	3
CHD	265	Advanced Observation & Participation in an Early Childhood Setting	3
HLT	100	First Aid and Cardiopulmonary Resuscitation	<u>3</u>
			15

Third Semester

HLT	135	Child Health and Nutrition	3
MTH	120	Introduction to Mathematics	<u>3</u>
			6

Total Semester Hours: 37

General Business

Award: Certificate

Length: 2 Semesters

Purpose: This program is designed to provide additional knowledge and skills for persons seeking immediate employment in local business and those who wish to become better prepared to operate their own small business.

Occupational Objectives: Employment opportunities might include assistant department head, office manager, small business manager or assistant manager.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses. Students with deficiencies in computer skills will complete additional coursework.

Curriculum Requirements: Students must satisfactorily complete each of the requirements listed below in order to be awarded this certificate.

Program Learning Outcomes: A student will be able to:

- Demonstrate effective written communication skills in a business setting.
- Apply mathematical reasoning skills to formulate and solve problems.
- Describe and use general business knowledge and skills, including managerial and supervisory concepts.
- Apply the principles of financial accounting.
- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Describe contemporary approaches to management and methods to create a positive work environment.

General Education Requirements (9 Credits):

ECO 201	Principles of Macroeconomics (3)
[or ECO 202	<i>Principles of Microeconomics (3)]</i>
ENG 111	College Composition I (3)
MTH 120	Introduction to Mathematics (3)

Program Requirements (22 Credits):

ACC 211	Principles of Accounting I (3)
BUS 100	Introduction to Business (3)
BUS 125	Applied Business Mathematics (3)
BUS 200	Principles of Management (3)
BUS 241	Business Law I (3)
ITE 115	Intro. to Computer Applications & Concepts (3)
MKT 100	Principles of Marketing (3)
SDV 108	College Survival Skills (1)

Minimum required for certificate: 31 Credits

Sample Schedule

General Business

Fall Semester

ACC 211	Principles of Accounting I	3
BUS 100	Introduction to Business	3
ITE 115	Intro. to Computer Applications & Concepts	3
MKT 100	Principles of Marketing	3
MTH 120	Introduction to Mathematics	3
SDV 108	College Survival Skills	<u>1</u>
		16

Spring Semester

BUS 125	Applied Business Mathematics	3
BUS 200	Principles of Management	3
BUS 241	Business Law	3
ECO 201	Principles of Macroeconomics [or ECO 202]	3
ENG 111	College Composition I	<u>3</u>
		15

Total Semester Hours: 32

General Education

Award: Certificate

Length: 2 Semesters

Purpose: The Certificate in General Education is designed for students who are preparing to transfer to a four-year institution after one year of study. The program may also be attractive to students who intend to transition into one of PHCC's associate degrees. Course selection should be made in consultation with an academic advisor to ensure that students complete courses required by their transfer institution.

Program Description: This program consists of a minimum of 33 credit hours of instruction distributed into general education courses. Only courses which are transfer level college courses may be counted in this degree. This curriculum is the general equivalent of the first year of study in a PHCC transfer degree and it may be tailored to meet the requirements of most transfer degree programs at four-year institutions.

Admission Requirements: Entry into this curriculum is obtained by meeting the admission requirements established by the College. You must take developmental coursework as required by placement testing.

Curriculum Requirements: Requirements for the certificate are listed in the curriculum below.

General Education/Program Requirements

ENG 111	College Composition I (3)
ENG 112	College Composition II (3)
SDV 108	College Survival Skills (1)

Humanities/Fine Arts Elective (6 credits) selected from:

HUM EEE (Humanities/Fine Arts Elective): ART 101 or ART 201, ART 102 or 202, ART 283, ART 284, CST 130 or CST 231, ENG 241, ENG 242, ENG 243, ENG 244, ENG 251, ENG 252, ENG 253, ENG 254, FRE 101, FRE 102, MUS 121, PHI 101, PHI 111, PHI 220, REL 200, REL 210, REL 231, SPA 101, SPA 102

Math Elective(3 credits) selected from:

MTH EEE (Math Elective): MTH 150, MTH 151, MTH 152, MTH 157, MTH 163, MTH 164, MTH 166, MTH 173, MTH 174, MTH 175, MTH 176, MTH 177, MTH 178, MTH 240, MTH 241, MTH 271

Natural Science Elective (8 credits) selected from:

NAS EEE (Natural Science Elective): BIO 101, BIO 102, BIO 141, BIO 142, BIO 231, BIO 232, CHM 111, CHM 112, GOL 105, GOL 106, GOL 206, GOL 225, PHY 201, PHY 202, PHY 241, PHY 242

Social Science Elective (9 credits) selected from:

SSC EEE (Social Science Elective): ECO 201, ECO 202, GEO 210, HIS 101, HIS 102, HIS 121, HIS 122, HIS 141, HIS 142, PLS 211, PLS 212, PSY 200, PSY 215, PSY 230, PSY 235, SOC 200, SOC 215, SOC 226, SOC 268

Minimum required for certificate: 33 Credits

Sample Schedule

General Education

First Semester

ENG 111	College Composition I	3
HUM EEE	Humanities/Fine Arts Elective	3
MTH EEE	Math Elective	3
NAS EEE	Natural Science Elective	4
SSC EEE	Social Science Elective	3
SDV 108	College Survival Skills	<u>1</u>
		17

Second Semester

ENG 112	College Composition II	3
HUM EEE	Humanities/Fine Arts Elective	3
NAS EEE	Natural Science Elective	4
SSC EEE	Social Science Elective	3
SSC EEE	Social Science Elective	<u>3</u>
		16

Total Semester Hours: 33

Heating, Ventilation, Air Conditioning & Refrigeration

Award: Certificate

Length: 3 Semesters

Purpose: This program provides the student with entry-level skills for employment in residential, commercial and industrial fields. It also provides advanced and upgraded training for those presently employed. Theoretical classroom experiences as well as hands on experiences are utilized.

Program Learning Outcomes: A graduate of the HVAC program will have demonstrated mastery of generic and specific residential, commercial and industrial occupational skills relative to the field Graduates will be prepared for EPA Certification.

Occupational Objectives: Graduates of this program will qualify for positions with residential contractors, commercial installers and industrial HVAC maintenance mechanics.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics will complete appropriate developmental education courses.

Curriculum Requirements: The student must satisfactorily complete all general education, program and elective requirements listed below to receive a Certificate in Heating, Ventilation, Air Conditioning and Refrigeration.

General Education Requirements (13 Credits):

ENG 131	Technical Report Writing I (3)
[or ENG 111	College Composition I (3)]
MTH 120	Introduction to Mathematics I (3)
HLT 100	First Aid & Cardiopulmonary Resuscitation (3)
ITE 115	Intro. to Computer Applications & Concepts (3)
SDV 108	College Survival Skills (1)

Program Requirements (36 Credits):

AIR 117	Metal Layout I (3)
AIR 121	Air Conditioning and Refrigeration I (4)
AIR 134	Circuits and Controls I (4)
AIR 154	Heating Systems I (3)
AIR 190	Coordinated Internship (1)
AIR 235	Heat Pumps (3)
AIR 238	Advanced Troubleshooting and Service (3)
AIR 253	Air Conditioning Systems III (3)
AIR 257	Gas Fired Warm Air Furnaces (4)
ELE 115	Basic Electricity (3)
AIR 299	Supervised Study in HVAC (2)
ENE 105	Solar Thermal Active and Passive Technology (4)
ENE 230	Geothermal Applications (4)

Minimum required for certificate: 49 Credits

Sample Schedule

Heating, Ventilation, Air Conditioning & Refrigeration

First Semester

AIR 121	Air Conditioning and Refrigeration I	4
AIR 154	Heating Systems I	3
ENG 131	Technical Report Writing (or ENG 111)	3
ELE 115	Basic Electricity	3
MTH 120	Introduction to Mathematics	3
SDV 108	College Survival Skills	<u>1</u>
		17

Second Semester

AIR 134	Circuits and Controls	4
AIR 235	Heat Pumps	3
ENE 105	Solar Thermal Active and Passive Technology	4
ENE 230	Geothermal Applications	<u>4</u>
		15

Third Semester

AIR 117	Metal Layout I	3
AIR 238	Advanced Troubleshooting & Service	3
AIR 253	Air Conditioning Systems III	3
AIR 299	Supervised Study in HVAC	2
HLT 100	First Aid & Cardiopulmonary Resuscitation	3
ITE 115	Intro. to Computer Applications & Concepts	<u>3</u>
		17

Total Semester Hours: 49

Health Sciences

Award: Certificate
Length: 3 semesters

Purpose: This program will prepare graduates for entry into many health science programs of study. Public School students may complete this program through dual enrollment for entry into many post secondary health science programs as a sophomore. The program is designed to serve both the needs of students interested in the associate degree nursing program at PHCC and those interested in allied health programs at other schools of choice. Students transferring to other schools are responsible for verifying transferability of PHCC courses.

Occupational Objectives: This certificate prepares the student for entry into many different health career programs.

Admission Requirements: Students must meet the general admission requirements established by the college. Certain certificate-related courses require satisfactory scores on college placement tests. Students with deficiencies will be required to complete satisfactorily developmental education courses before enrolling in these courses. Admission to the Health Sciences Certificate does not guarantee admission to the associate degree nursing program. Students interested in being admitted to the associate degree nursing need to see the nursing advisor.

Curriculum Requirements: The student must satisfactorily complete all courses or approved substitutes in the curriculum to receive a Certificate in Health Sciences. Students who complete a Health Science Certificate must earn a "C" average in all science, social science and math classes.

CST	110	Introduction to Communication (3)
BIO	231-232	Human Anatomy and Physiology I-II (4) (4)
ENG	111-112	College Composition I-II (3)(3)
HLT	143	Medical Terminology I (3)
HLT	230	Principles of Nutrition and Human Development (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
MTH	126	Mathematics for Allied Health (3)
PSY	230	Developmental Psychology (3)
SDV	108	College Survival Skills (1)
SOC	200	Principles to Sociology (3)

Minimum required for certificate: 36 credits

Sample Schedule Health Sciences

First semester

SDV	108	College Survival Skills	1
CST	110	Introduction to Speech Communication	3
ENG	111	College Composition I	3
ITE	115	Intro. to Computer Applications & Concepts	3
HLT	143	Medical Terminology I	<u>3</u>
			13

Second Semester

ENG	112	College Composition II	3
BIO	231	Human Anatomy and Physiology I	4
HLT	230	Principles of Nutrition and Human Development	3
PSY	230	Developmental Psychology	<u>3</u>
			13

Third Semester

BIO	232	Human Anatomy and Physiology II	4
MTH	126	Mathematics for Allied Health	3
SOC	200	Principles to Sociology	<u>3</u>
			10

Total Semester Hours: 36

Industrial Welding

Award: Certificate
Length: 3 Semesters

Purpose: The curriculum is designed to provide skills and knowledge in general and specialized welding.

Program Learning Outcomes: Program graduates' have generic and specific occupational skills to be competitive in welding positions in a variety of settings such as welding specialist, welding assistant, self-employment and industrial maintenance. Graduates demonstrate proficiency in 21st Century skills and use of current technological tools of the profession, and take an American Welding Society D1.1 Structural Welding Code Certification Test.

Occupational Objectives: Employment opportunities for graduates of this program might include welding specialist, welding assistant, self-employment and industrial maintenance.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses.

Curriculum Requirements: The student must satisfactorily complete all general education, program and elective requirements listed below to receive a Certificate in Industrial Welding.

General Education Requirements (9 Credits):

ENG 131 Technical Report Writing I (3)
[or ENG 111 College Composition I (3)]
MTH 120 Introduction to Mathematics (3)
HLT 100 First Aid & Cardiopulmonary Resuscitation (3)

Program Requirements (30 Credits):

SDV 108 College Survival Skills (1)
WEL 117 Oxyacetylene Welding and Cutting (3)
WEL 123 ARC Welding (Basic) (4)
WEL 124 ARC Welding (Advanced) (4)
(Skill demonstration test must be satisfactorily completed in WEL 124 before proceeding into WEL 126)
WEL 126 Pipe Welding I (3)
WEL 130 Inert Gas Welding (3)
WEL 141 Welding Qualification Tests I (3)
WEL 145 Welding Metallurgy (3)
WEL 150 Welding Drawing and Interpretation (2)
WEL 198 Seminar and Project (4)

Minimum required for certificate: 39 Credits

Sample Schedule

Industrial Welding

First Semester

ENG	131	Technical Report Writing I <i>(or ENG 111)</i>	3
MTH	120	Introduction to Mathematics	3
SDV	108	College Survival Skills	1
WEL	117	Oxyacetylene Welding and Cutting	3
WEL	123	ARC Welding (Basic)	4
WEL	150	Welding Drawing and Interpretation	<u>2</u>
			16

Second Semester

HLT	100	First Aid and Cardiopulmonary Resuscitation	3
WEL	126	Pipe Welding I	3
WEL	124	ARC Welding (Advanced)	4
WEL	130	Inert Gas Welding	3
WEL	145	Welding Metallurgy	<u>3</u>
			16

Third Semester

WEL	198	Seminar and Project	4
WEL	141	Welding Qualification Tests I	<u>3</u>
			7

Total Semester Hours: 39

Practical Nursing

Award: Certificate
Length: 3 Semesters

Purpose: The purpose of this program is to prepare selected students to qualify as practitioner of practical nursing in a variety of health service facilities. After successful completion of the program, students will be eligible for the National Council Licensure Examination-Practical Nurse. Passage of this exam will make the graduate eligible to be licensed as a Licensed Practical Nurse in the Commonwealth of Virginia.

Program Learning Outcomes: A graduate of the program will have demonstrated mastery of generic and specific occupational knowledge and skills prior to graduation. Skill and knowledge attainment is assured through regular, valid and reliable comprehensive assessment. Graduates of the program will be eligible to take the National Council Licensure Examination for Practical Nurses.

Special Accreditation Status: The program is approved by the Virginia Board of Nursing.

Occupational Objectives: Employment opportunities for the licensed practical nurse include staff positions in hospitals, long term care facilities, physicians' offices, clinics, day care centers, industry, schools and home health care agencies.

Admission Requirements: The applicant must meet the following requirements for admission into the required clinical courses ((PNE 161, 141, 142, 163, 145, 164, and 158). Interested students should contact the nursing/allied health office for academic advising.

1. Be accepted as a student to the college.
2. Graduate from high school or a GED.
3. Complete the Compass test. If scores indicate, the applicant will be required to successfully complete developmental courses before submitting a practical nursing program application.
4. Validate computer competency equivalent to ITE 95.
5. Complete one unit of high school algebra with no grade below a 'C'. Deficiencies can be made up through approved developmental or college level courses. Deficiencies must be completed before application to the practical nursing program.
6. Complete one high school unit of college prep level science with no grade below a C. Course to be used for high school substitute class: BIO 101 or BIO 102
7. Maintain cumulative college or high school grade point average of 2.5 or better.
8. After meeting the above criteria, submit an application for the Practical Nursing Program during the specified advertised application period, along with required paperwork, i.e. high school transcripts, college transcripts, etc. during the application period.
9. Achieve a passing score on the Admission Test.
10. Students will be scheduled for the admission test after their application file has been reviewed and approved. Applicants must have satisfactory scores in reading, mathematics, science, English and language usage.

Admission procedure: Applications to the nursing program are processed during specified advertised application periods. At the end of the advertised application period, completed applications with required supporting documents, will be

reviewed and considered. Admission testing will be offered to students meeting all admission requirements. Students who meet criteria, meaning score within the state regulation (45th percentile ranking) will be given priority. NOTE: When admission must be limited because the number of qualified applicants exceeds available space, admission to the program will be given to applicants who scored at or above the 45th percentile ranking, and are also residents of the college service area. If seats are still available applicants who scored at or above the 45th percentile ranking, who live outside of the college service area will be offered admission starting with the higher percentile ranking, until all seats are filled. Applicants who are not accepted will be eligible to reapply at the next application period, at which time applicants meeting admission requirements will be allowed to repeat the admission test, and the most recent scores will be used for admission consideration.

The typical physical demands of a licensed practical nurse include the following: full range of motion including handling and lifting patients and/or equipment, manual and finger dexterity and eye-hand coordination. The job generally requires standing and walking for extensive periods of time. The licensed practical nurse should be able to lift and carry items weighing up to 50 pounds. The job settings have stressful conditions and/or irregular hours. There is the potential for exposure to communicable diseases. After admission to the clinical courses, the prospective student is provided with a physical exam form that must be completed by a physician prior to enrolling in nursing classes.

Upon admission, students are required to undergo mandatory drug screening and a criminal background check. Students must have a negative drug screen in order to begin clinical courses. Any charges or costs associated with the criminal background check and drug screen will be the responsibility of the student.

Please note that the Virginia State Board of Nursing may refuse to admit a candidate to any licensure examination and refuse to issue a license or certificate to any applicant who has been convicted of any felony or misdemeanor involving moral turpitude. Students must produce a satisfactory criminal background check to the standards of all clinical agencies used by the college for experiential learning prior to enrolling in the Practical Nursing program.

Financial Requirements: In addition to the usual college tuition and fees, this program requires additional expenses. Approximate costs include:

Uniforms	\$230
Physical Examination	\$100
Books	\$400-\$800
Graduation Pin	cost depends on price of gold or silver
AHA BCLS CPR certification	\$127
Standardized Tests	\$97
Criminal Background Checks	\$50-\$75
Drug Screens	\$40-\$50
Application for Licensure fees	\$370
Transportation to clinical agencies, seminars, etc. as required	

Curriculum Requirements: Students must successfully complete all of the general education and program listed below

to be awarded this certificate. To remain in the program, a student must have a "C" or above in all PNE and NUR courses. Additionally, student must have a grade of "C" or above in all semesters of natural science and psychology courses.

General Education Requirements (11 Credits):

ENG 111	College Composition I (3)
NAS 150	Human Biology (4)
PSY 230	Developmental Psychology (3)
HLT 141	Introduction to Medical Terminology (1)

Program Requirements (37 Credits):

PNE 161	Nursing in Health Changes I (6)
PNE 141-142	Nursing Skills I-II (4)
NUR 135	Drug Dosage Calculations (2)
PNE 163	Nursing in Health Changes III (8)
PNE 145	Trends in Practical Nursing (1)
PNE 164	Nursing in Health Changes IV (11)
PNE 173	Pharmacology for Practical Nurses (2)
PNE 158	Mental Health and Psychiatric Nursing (2)
SDV 108	College Survival Skills (1)

Minimum required for certificate: 49 Credits

Sample Schedule

Practical Nursing

First Semester

PNE 161	Nursing in Health Changes I	6
PNE 141	Nursing Skills I	2
PNE 142	Nursing Skills II	2
NAS 150	Human Biology	4
NUR 135	Drug Dosage Calculations	2
HLT 141	Introduction to Medical Terminology	1
SDV 108	College Survival Skills	<u>1</u>
		18

Second Semester

PNE 163	Nursing in Health Changes III	8
PNE 173	Pharmacology for PN	2
PSY 230	Developmental Psychology	3
ENG 111	College Composition I	<u>3</u>
		16

Third Semester

PNE 164	Nursing in Health Changes IV	11
PNE 158	Mental Health and Psychiatric Nursing	2
PNE 145	Trends in Practical Nursing	<u>1</u>
		14

Total Semester Hours: 48

Therapeutic Massage

Award: Certificate
Length: 3 Semesters

Purpose: To prepare graduates for the national certification in Massage Therapy in Virginia.

Program Learning Outcomes: A graduate of the program will have demonstrated mastery of generic and specific occupational skills prior to graduation. Skill attainment is assessed through regular, valid, and reliable comprehensive assessment. Graduates will be eligible to take the National Certification Board for Therapeutic1 Massage and Bodywork examination. After successful passage of this exam, the graduate will be eligible for licensure in Virginia as a Massage Therapist.

Occupational Objectives: Licensed graduates with national certification can work independently in a variety of health care, business, and recreational settings as well as self employment. Businesses using massage therapists include hotels, cruise ships, hospitals, corporations, doctors' offices, and many spa or personal wellness agencies.

National Certification: Graduates of the program must have a minimum of 700 documented hours of supervised training to be eligible to take the national test. Passage of the test will allow graduates to become licensed as a Massage Therapist by the Commonwealth of Virginia.

Admission Requirements: Students must meet the general admission requirements established by the college. Students with deficiencies in English or mathematics must complete appropriate developmental education courses. (See Allied Health Advisor prior to enrollment)

Curriculum Requirements: The student must satisfactorily complete all general education, program and elective requirements listed below to receive a Certificate in Therapeutic Massage.

General Education Requirements (15 Credits):

ENG	111	College Composition I (3)
ENG	112	College Composition II (3)
BUS	165	Small Business Management (3)
HLT	105	Cardiopulmonary Resuscitation (1)
PED	109	Yoga (1)
NAS	150	Human Biology (4)

Program Requirements (25 Credits):

HLT	195	Theories of Massage (3)
HLT	180	Therapeutic Massage I (3)
HLT	280	Therapeutic Massage II (3)
HLT	281	Therapeutic Massage III (3)
HLT	295	Specialized Massage Therapies (3)
HLT	220	Concepts of Disease (3)
HLT	143	Medical Terminology I (3)
HLT	116	Personal Wellness (3)
SDV	108	College Survival Skills (1)

Minimum required for certificate: 40 Credits

Students must complete each of the above requirements for a total of 40 credit hours.

Please note that the core massage courses are offered in the evenings and on Saturdays.

Sample Schedule

Therapeutic Massage

First Semester

ENG	111	College Composition I	3
HLT	195	Theories of Massage	3
HLT	180	Therapeutic Massage I	3
NAS	150	Human Biology	4
SDV	108	College Survival Skills	<u>1</u>
			14

Second Semester

ENG	112	College Composition II	3
HLT	116	Personal Wellness	3
HLT	280	Therapeutic Massage II	3
HLT	295	Specialized Massage Therapies	3
PED	109	Yoga	<u>1</u>
			13

Third Semester

HLT	143	Medical Terminology	3
BUS	165	Small Business Management	3
HLT	105	Cardiopulmonary Resuscitation	1
HLT	220	Concepts of Disease	3
HLT	281	Therapeutic Massage III	<u>3</u>
			13

Total Semester Hours: 40

Career Studies Certificates

Art Studies

Automotive Engine Technology

Auto Body Technology

Building Trades Technology

Community Services Leadership

Computer Service Technician

Culinary Arts

Culinary and Hospitality Management

Customer Support Specialist

Early Childhood Instruction

E-Commerce Management

Emergency Medical Technician – Basic

Emergency Medical Technician-Intermediate

Emergency Medical Technician-Paramedic

Entrepreneurial Studies

Graphic Communications

Heating, Ventilation, Air Conditioning &
Refrigeration

Horticulture

Industrial Controls

Industrial Maintenance Electronics

International Business

Internet Webmaster

Management Assistant

Manufacturing Technician

Medical Transcription

Microcomputer Literacy

Motorsports Engines Technology

Motorsports Fabrication and Set-Up
Technology

Motorsports Management

Nurse Aide Training

Office Assisting

Pharmacy Technician

Residential/Commercial/Industrial Electrician

School-Age Child Care

Small Business Management

Supervision

Theatre Arts

Viticulture

Welding

Wellness

Career Studies Certificates require less than a full year of study in an occupational area, but include key courses for a strong introduction to the area of study. They are designed primarily to enhance or develop job skills.

Career Studies Certificates

Length: Variable for upgrading, retraining and continuing career students. The options within this program normally amount to the minimum equivalent of one semester of full-time community college work and not more than the equivalent of a year (9-29) credits.

Purpose: Many students seek post-secondary career programs of study that are less than the conventional one-or two-year programs. The Career Studies Certificate program is a response to the needs of many adults within PHCC's service region and is intended to represent the minimum amount of college course work needed in these fields of study. Each of the program options is designed as a distinct "mini-curriculum" within a broader range of adult educational possibilities.

Certificate Award: After satisfactorily completing courses with a "C" average (2.0), the student should contact the registrar's office and apply for graduation after verification that all program requirements have been met. Students interested in a certificate, diploma or associate degree should talk to a counselor to investigate the possibilities of using these courses in other curricula.

Admission Requirements: Students must meet the general admission requirements established by the college.

Other Information: Certain certificate-related courses require satisfactory scores on college placement tests. Students with deficiencies will be required to complete satisfactorily developmental education courses before enrolling in these courses. Other certificate-related courses may be taken while developmental education are being completed. Some programs, such as Therapeutic Massage require additional expenditures for supplies and equipment. Please check with the appropriate division dean for this information.

Art Studies

Purpose: This program is designed to provide skills for the individual pursuing a vocational or other artistic interest.

Program Learning Outcomes: A student will be able to:

- Demonstrate an appreciation for the arts.
- Demonstrate competency in at least two areas within the field of visual arts.

ART 121 Drawing I (3)
ART 122 Drawing II (3)
[or ART 242 *Painting II (3)*]
ART 201 Art History I (3)
[or ART 101 *History and Appreciation of Art I (3)*]
ART 241 Painting I (3)
SDV 108 College Survival Skills (1)

Student must complete the above 13 credits to be awarded the Career Studies Certificate in Art Studies.

Automotive Engine Technology

Purpose: This program is designed for students who wish to enter advanced Motorsports engine courses. Students must score 80 points or higher on the PHCC engine technology assessment to proceed. Students with deficiencies in Automotive Technology will complete additional course work. Students must complete all required courses as advised by department faculty and maintain a 2.5 Curriculum Grade Point Average to continue in the program. Tools for the program are required.

Program Learning Outcomes: Graduates will have fundamental skills for advanced training in dynamics of high performance engines. Graduates will demonstrate proficiency in automotive engine repair and maintenance.

AUT 109 Applied Mathematics for Automotive Technicians (3)
AUT 111 Automotive Engines I (3)
AUT 112 Automotive Engines II (3)
AUT 113 Cylinder Block Service I (3)
AUT 114 Cylinder Head Service II (3)
AUT 120 Introduction to Automotive Machine Shop (3)
AUT 190 Coordinated Internship (1)
SDV 108 College Survival Skills (1)

Students must complete the above 20 credit hours to be awarded the Career Studies Certificate in Automotive Engine Technology.

Auto Body Technology

Purpose: This program is designed for students who wish to gain basic skills for entry level positions in Auto Body repair.

Program Learning Outcomes: Graduates will have fundamental skills for entry level auto body repair. Graduates will demonstrate proficiency in automotive collision repair and maintenance.

AUB 106 Basic Sheet Metal Operations (4)
AUB 116 Auto Body Repair (4)
AUB 118 Automotive Paint Preparation (4)
AUB 119 Automotive Painting (4)
AUB 290 Coordinated Internship (3)

Students must complete the above 19 credit hours to be awarded the Career Studies Certificate in Auto Body Technology.

Building Trades Technology

Purpose: This program is designed to provide introductory training for individual seeking entry-level employment in trades-related fields.

Program Learning Outcomes Graduates will have fundamental skills for entry level construction tradesman. Graduates will demonstrate proficiency in fundamental carpentry, electricity, plumbing, and masonry.

BLD	105	Shop Practices and Procedures (3)
BLD	111	Blueprint Reading and Building Code (3)
BLD	135	Building Construction Carpentry (3)
BLD	140	Principles of Plumbing Trade I (3)
BLD	147	Principles of Block and Bricklaying (3)
BLD	EEE	Elective (3)
ELE	110	Home Electric Power (3)
ENG	111	College Composition I (3)
MTH	21	Survey of Technical Mathematics I (3)
SDV	108	College Survival Skills (1)

Students must complete the above 28 credit hours to be awarded the Career Studies Certificate in Building Trades Technology.

Community Services Leadership

Purpose: This program is designed for front-line and mid-level supervisors and aspiring leaders in community service-oriented organizations within the region, such as Piedmont Community Services.

Program Learning Outcomes: Graduates will develop supervisory and leadership skills necessary to become effective supervisors, managers, and leaders.

BUS	111	Principles of Supervision I (3)
BUS	112	Principles of Supervision II (3)
BUS	205	Human Resource Management (3)
BUS	265	Ethical Issues in Management (3)
CST	115	Small Group Communication (3) or
CST	110	Introduction to Communication (3)
BUS or PBS		Elective (3)

Students must complete the above 18 credit hours to be awarded the Career Studies Certificate in Community Services Leadership.

Computer Service Technician

Purpose: This program is designed to provide skills and knowledge needed for employment as a computer service technician and certification for the CompTIA A+ exam.

Program Learning Outcomes: A student will be able to:

- Demonstrate skills in computer hardware knowledge related to installation, configuration, and upgrading, diagnosing and troubleshooting, preventive maintenance, printers, and basic

networking.

- Demonstrate skills in computer operating system knowledge related to operating system fundamentals, installation, configuration, and upgrading, diagnosing and troubleshooting, and networks.

CSC	110	Introduction to Computing (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	199	Supervised Study-Certification Exam Preparation (3)
ITN	106	Microcomputer Operating Systems (3)
ITN	107	Personal Computer Hardware and Troubleshooting (3)
SDV	108	College Survival Skills (1)

Students must complete the above 16 credit hours to be awarded the Career Studies Certificate in Computer Service Technician.

Culinary Arts

Purpose: This program prepares graduates for entry level responsibilities in the hospitality industry.

Program Learning Outcomes: Upon completion, each student has a working knowledge of food production in a professional culinary work environment.

HRI	106	Principles of Culinary Arts I (3)
HRI	119	Applied Nutrition for Food Service (3)
HRI	128	Principles of Baking (3)
HRI	134	Food and Beverage Service Management (3)
HRI	154	Principles of Hospitality Management (3)
HRI	158	Sanitation & Safety (3)
HRI	190	Coordinated Internship (3)
HRI		Elective (3)
ITE	115	Intro. To Computer Applications & Concepts (3)
SDV	108	College Survival Skills (1)

Students must complete the above 28 credit hours to be awarded the Career Studies Certificate in Culinary Arts.

Culinary and Hospitality Management

Purpose: This program prepares graduates to fulfill mid to upper level responsibilities in the hospitality industry.

Program Learning Outcomes: Upon completion, each student has the knowledge base in food production, dining and managing food service tasks to work as lead cook in the food service field.

BUS	165	Small Business Management (3)
BUS	205	Human Resource Management (3)
HRI	145	Garde Manger (3)
HRI	158	Sanitation and Safety (3)
		<i>[or approved HRI Elective (3)]</i>
HRI	207	American Regional Cuisine (3)
HRI	218	Fruit, Vegetable, and Starch Preparation (3)
HRI	219	Stock, Soup, and Sauce Preparation (3)

HRI	220	Meat, Seafood and Poultry Preparation (3)
HRI	251	Food and Beverage Cost Control I (3)
HRI	290	Internship in Culinary Arts (2)

Students must complete the above 29 credit hours to be awarded the Career Studies Certificate in Culinary and Hospitality Management.

Customer Support Specialist

Purpose: This program is designed to provide skills and knowledge for employment as a customer support/help desk associate and certification from the Help Desk Institute as a Customer Support Specialist.

Program Learning Outcomes: A student will be able to:

- Demonstrate knowledge and skills related to the customer service profession in the areas of professionalism, customer service skills, and customer service processes.
- Demonstrate proficiency in personal computer operations and applications.

CSC	110	Introduction to Computing (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	199	Supervised Study-Certification Exam Prep. (3)
MKT	260	Customer Service Management (3)
SDV	108	College Survival Skills (1)

Students must complete the above 13 credit hours to be awarded the Career Studies Certificate in Customer Support Specialist.

Early Childhood Instruction

Purpose: This program is designed to provide individuals working in supportive roles in education with appropriate knowledge and skills needed in the classroom. Students should complete all necessary developmental courses prior to or in conjunction with these courses.

Program Learning Outcomes: Graduates will have fundamental skills for entry level classroom assistance. Graduates will demonstrate proficiency in education methods, instructional technology, presentations, and lesson planning.

CHD	109	Music and Movement for Children (3)
CHD	118	Language Arts for Children (3)
CHD	120	Introduction to Early Childhood Education (3)
CHD	125	Creative Activities for Children (3)
CHD	126	Math and Science for Children (3)
CHD	205	Guiding the Behavior of Children (3)
HLT	100	First Aid and Cardiopulmonary Resuscitation (3)
HLT	135	Child Health and Nutrition (3)
PSY	135	Child Care Psychology (3)

Students must complete each of the above requirements for a total of 27 credits to be awarded the Career Studies Certificate in Early Childhood Instruction.

Emergency Medical Technician – Basic

Purpose: This program is designed to provide knowledge and skills to prepare the student to qualify as practitioners of emergency medical services in a variety of health service facilities. Employment opportunities for the emergency medical technician include pre-hospital EMS agencies, municipal fire departments, emergency departments in hospitals, nursing homes, physician's offices, clinics, industry, and home health care agencies. After successful completion of the program students will be eligible to take both the National Registry of Emergency Medical Technicians and the Virginia Office of EMS Emergency Medical Technician certification examination.

Program Learning Outcomes: Graduates of the program will have the knowledge and skills to practice as an Emergency Medical Technician in a variety of health service facilities. A graduate of the program will have demonstrated mastery of generic and specific basic life support skills prior to graduation. Skill attainment is assured through regular, valid and reliable comprehensive assessment.

Admission Requirements: Students must meet the following requirements for admission to the EMT – Basic Career Studies Certificate Program. Interested students should contact the EMS Program Director for academic advising.

1. Be accepted as a student to the college.
2. Graduation from high school or satisfactory completion of the GED.
3. Completion of PHCC Admission Placement tests unless appropriate college level English or math courses have been successfully completed.
4. Students holding current Virginia certification as either an Emergency Medical Technician or EMT-Enhanced may be considered for advanced placement after all other admission requirements are met.

The typical physical demands of an emergency medical technician include the following: full range of motion including handling and lifting patients and/or equipment, manual and finger dexterity and eye-hand coordination. The job generally requires standing, walking for extensive periods of time, and working in all type of environments. The emergency medical technician should be able to lift and carry items weighing up to 50 pounds. The job settings may have stressful conditions and/or irregular hours. There is a potential for exposure to communicable diseases.

Please note that any prospective EMS student with a criminal conviction needs to speak with the EMS Program Director prior to enrollment at PHCC. Certain convictions will prevent the person from being certified as an Emergency Medical Services Provider in Virginia. Students must produce a satisfactory

criminal background check to the standards of all clinical agencies used by the college for experiential learning prior to enrolling in the program.

To graduate from the program, a student must have a “C” or above in all EMS courses.

EMS 111	Emergency Medical Technician – Basic (7)
EMS 120	EMT-Basic Clinical (1)
SDV 108	College Survival Skills (1)

Students must complete the above 9 credits to be awarded the Career Studies Certificate in EMT-Basic.

Emergency Medical Technician-Intermediate

Purpose: This program is designed to provide knowledge and skills to prepare the student to qualify as practitioners of emergency medical services in a variety of health service facilities. Employment opportunities for the EMT-Intermediate include pre-hospital EMS agencies, municipal fire departments, emergency departments in hospitals, nursing homes, physician’s offices, clinics, industry, and home health care agencies. After successful completion of the program students will be eligible to take the National Registry of Emergency Medical Technicians EMT-Intermediate certification examination.

Program Learning Outcomes: Graduates of the program will have the knowledge and skills to practice as an EMT-Intermediate in a variety of health service facilities. A graduate of the program will have demonstrated mastery of generic and specific basic and advanced life support skills prior to graduation. Skill attainment is assured through regular, valid and reliable comprehensive assessment.

Admission Requirements: The applicant must meet the following requirements for admission to the EMS Education program. Interested students should contact the EMS Program Director for academic advising.

1. Be accepted as a student to the college.
2. Graduation from high school or satisfactory completion of the GED. Verification of high school graduation or GED is required by Virginia OEMS for this level of certification. Submission of official transcripts or GED scores is mandatory for all applicants.
3. Completion of PHCC Admission Placement tests unless appropriate college level English or math courses have been successfully completed. If any developmental courses in English or math are needed as indicated by student’s scores, these courses must be successfully completed before the student can enroll in EMS 151 – Introduction to Advanced Life Support. Failure to successfully complete pre-requisites for enrollment in

EMS 151 will delay program progression in the EMS curriculum by one academic year.

4. A cumulative college grade point average of 2.0 or better in all related and general education requirements completed before admission into the EMS Education program is desired and will be given higher priority for admission into the program.
5. Students currently enrolled at the college, in addition to applicants holding current Virginia certification as either an Emergency Medical Technician or EMT-Enhanced, will be given priority for admission into the program and may be considered for advanced placement after all other admission requirements are met.
6. Submit an *EMS Program Application* form along with required paperwork, i.e. high school transcripts, college transcripts, current EMS certification, etc. during the specified EMS Education program application period.

The typical physical demands of an EMT-Intermediate include the following: full range of motion including handling and lifting patients and/or equipment, manual and finger dexterity and eye-hand coordination. The job generally requires standing, walking for extensive periods of time, and working in all type of environments. The EMT-Intermediate should be able to lift and carry items weighing up to 50 pounds. The job settings may have stressful conditions and/or irregular hours. There is a potential for exposure to communicable diseases. After admission to the EMS Education program, the prospective student is provided with an EMS Physical Examination form that must be completed by a physician prior to enrolling in the clinical or field internship classes.

Upon admission, all students are required to undergo mandatory drug screening. Students must have a negative drug screen in order to begin the clinical or field internship classes.

Please note that any prospective EMS student with a criminal conviction needs to speak with the EMS Program Director prior to enrollment at PHCC. Certain convictions will prevent the person from being certified as an Emergency Medical Services Provider in Virginia. Students must produce a satisfactory criminal background check to the standards of all clinical agencies used by the college for experiential learning prior to enrolling in the EMS program.

To remain in the program, a student must have a “C” or above in all EMS courses.

EMS 151	Introduction to Advanced Life Support (4)
EMS 153	Basic ECG Recognition (2)
EMS 155	ALS Medical Care (4)
EMS 157	ALS Trauma Care (3)
EMS 159	ALS Special Populations (3)
EMS 170	ALS Internship I (2)

EMS 172	ALS Clinical Internship II (2)
EMS 173	ALS Field Internship II (1)
SDV 108	College Survival Skills (1)

Students must complete the above 22 credits to be awarded the Career Studies Certificate in EMT-Intermediate.

Emergency Medical Technician-Paramedic

Purpose: This program is designed to provide knowledge and skills to prepare the student to qualify as practitioners of emergency medical services in a variety of health service facilities. Employment opportunities for the paramedic include pre-hospital EMS agencies, municipal fire departments, emergency departments in hospitals, nursing homes, physician's offices, clinics, industry, and home health care agencies. After successful completion of the program students will be eligible to take the National Registry of Emergency Medical Technicians Paramedic certification examination.

Program Learning Outcomes: Graduates of the program will have the knowledge and skills to practice as a Paramedic in a variety of health service facilities. A graduate of the program will have demonstrated mastery of generic and specific basic and advanced life support paramedic skills prior to graduation. Skill attainment is assured through regular, valid and reliable comprehensive assessment.

Admission Requirements: The applicant must meet the following requirements for admission to the EMS Education program. Interested students should contact the EMS Program Director for academic advising.

1. Be accepted as a student to the college.
2. Graduation from high school or satisfactory completion of the GED. Verification of high school graduation or GED is required by Virginia OEMS for this level of certification. Submission of official transcripts or GED scores is mandatory for all applicants.
3. Completion of PHCC Admission Placement tests unless appropriate college level English or math courses have been successfully completed. If any developmental courses in English or math are needed as indicated by student's scores, these courses must be successfully completed before the student can enroll in EMS 151 – Introduction to Advanced Life Support. Failure to successfully complete pre-requisites for enrollment in EMS 151 will delay program progression in the EMS curriculum by one academic year.
4. A cumulative college grade point average of 2.0 or better in all related and general education requirements completed before admission into the

EMS Education program is desired and will be given higher priority for admission into the program.

5. Students must be currently enrolled at the college and have completed requirements for graduation from the EMT Intermediate Career Studies Certificate Program or must possess either current Virginia or National Registry EMT-Intermediate certification to be accepted into the program.
6. Submit an *EMS Program Application* form along with required paperwork, i.e. high school transcripts, college transcripts, current EMS certification, etc. during the specified EMS Education program application period.

The typical physical demands of a paramedic include the following: full range of motion including handling and lifting patients and/or equipment, manual and finger dexterity and eye-hand coordination. The job generally requires standing, walking for extensive periods of time, and working in all type of environments. The paramedic should be able to lift and carry items weighing up to 50 pounds. The job settings may have stressful conditions and/or irregular hours. There is a potential for exposure to communicable diseases. After admission to the EMS Education program, the prospective student is provided with an EMS Physical Examination form that must be completed by a physician prior to enrolling in the clinical or field internship classes.

Upon admission, all students are required to undergo mandatory drug screening. Students must have a negative drug screen in order to begin the clinical or field internship classes.

Please note that any prospective EMS student with a criminal conviction needs to speak with the EMS Program Director prior to enrollment at PHCC. Certain convictions will prevent the person from being certified as an Emergency Medical Services Provider in Virginia. Students must produce a satisfactory criminal background check to the standards of all clinical agencies used by the college for experiential learning prior to enrolling in the EMS program.

To remain in the program, a student must have a "C" or above in all courses.

EMS 201	Professional Development (3)
EMS 205	Advanced Pathophysiology (4)
EMS 207	Advanced Patient Assessment (3)
EMS 209	Advanced Pharmacology (4)
EMS 211	Operations (2)
EMS 242	ALS Clinical Internship III (1)
EMS 243	ALS Field Internship III (1)
EMS 244	ALS Clinical Internship IV (1)
EMS 245	ALS Field Internship IV (1)
NAS 150	**Human Biology (4)
SDV 108	College Survival Skills (1)

** Student may substitute BIO 231 – Human Anatomy & Physiology I or BIO 232 – Human Anatomy & Physiology II.

Student must complete the above 25 credits to be awarded the Career Studies Certificate in EMT-Paramedic.

E-Commerce Management

Purpose: This program is designed to provide skills related to electronic commerce, electronic marketing, and web page design to entrepreneurs and other business professionals.

Program Learning Outcomes: A student will be able to:

- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Demonstrate the ability to plan.
- Demonstrate knowledge of design and construction of web pages for effective business use.

BUS	116	Entrepreneurship (3)
BUS	280	Introduction to International Business (3)
ITD	110	Web Page Design I (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	130	Introduction to Internet Services (3)
MKT	100	Principles of Marketing (3)
MKT	260	Customer Service Management (3)
MKT	281	Principles of Internet Marketing (3)
SDV	108	College Survival Skills (1)

Students must complete the above 25 credits to be awarded the Career Studies Certificate in E-Commerce Management.

Entrepreneurial Studies

Purpose: This program is designed to provide skills in establishing a successful small business.

Program Learning Outcomes: A student will be able to:

- Demonstrate knowledge in the development of a business plan.
- Describe the qualities needed for a successful entrepreneur.

BUS	165	Small Business Management (3)
BUS	116	Entrepreneurship (3)
SDV	108	College Survival Skills (1)
Approved Elective (3)		

Students must complete the above 10 credits to be awarded the Career Studies Certificate in Entrepreneurial Studies.

Graphic Communications

Purpose: This program is designed to provide skills specifically related to the design and generation of computer graphics and page layout.

Program Learning Outcomes: A student will be able to:

- Demonstrate skills in the development of computer graphics.
- Demonstrate skills in the development of web pages.

ART	121	Drawing I (3)
ITD	110	Web Page Design I (3)
ITD	112	Designing Web Page Graphics (3)
ITD	220	Web Page Design II (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	130	Introduction to Internet Services (3)
ITP	160	Intro. to Game Design & Development (3)
SDV	108	College Survival Skills (1)
Approved Fine Arts elective (3)		

Student must complete the above 25 credits to be awarded the Career Studies Certificate in Graphic Communications.

Heating, Ventilation, Air Conditioning & Refrigeration

Purpose: This program is designed to provide the current practitioner with advanced skills needed for residential, commercial, and industrial HVAC servicing.

Program Learning Outcomes: Graduates will have fundamental skills for installation and repair of HVAC control systems. Graduates will demonstrate proficiency in electrical codes, OSHA criteria, system installation, system balancing, and system troubleshooting.

AIR	117	Metal Layout I (3)
AIR	121	Air Conditioning and Refrigeration I (4)
AIR	134	Circuits and Controls (4)
AIR	154	Heating Systems I (3)
AIR	235	Heat Pumps (3)
AIR	238	Advanced Troubleshooting & Service (3)
AIR	299	Supervised Study in HVAC (2)
ENE	230	Geothermal Applications (4)
ELE	115	Basic Electricity (3)

Student must complete the above requirements for a total of 29 credits to receive the Career Studies Certificate in HVAC.

Horticulture

Purpose: The purpose of this program is to provide broad based skills to be applied to the horticultural industry. Graduates will be prepared for a variety of employment opportunities such as: Landscaper, Landscape Contractor, nursery employee, and estate grounds maintenance. Applicants must meet placement requirements of ENF 3 or above, and MTE 1-3.

HRT	100	Introduction to Horticulture (3)
HRT	110	Principles of Horticulture (3)
HRT	115	Plant Propagation (3)
HRT	190	Coordinated Internship (2)
HRT	201	Landscape Plants I (3)
HRT	202	Landscape Plants II (3)
HRT	226	Greenhouse Management (3)
HRT	275	Landscape Construction and Maintenance (3)

VEN	120	Viticulture I (3)
VEN	121	Viticulture II (3)

Students must complete the above 29 credit hours to be awarded the Career Studies Certificate in Horticulture.

Industrial Controls

Purpose: This program is designed to provide the knowledge and skills needed for installation, maintenance and repair of advanced technology production equipment.

Program Learning Outcomes: Graduates will have fundamental skills for installation and repair of electrical control systems. Graduates will demonstrate proficiency in electrical codes, OSHA criteria, programming system controllers, and system troubleshooting.

ELE	113-114	Electricity I-II (6)
ELE	133-134	Practical Electricity I-II (6)
ELE	138	National Electrical Code (2)
ELE	239	Programmable Controllers (3)
ELE	240	Advanced Programmable Logic Controllers (3)
ETR	141	Electronics I (3)
ETR	151	Electronic Circuits/Troubleshooting (2)
ETR	168	Digital Circuits and Fundamentals (3)
ETR	198	Seminar and Project in Troubleshooting (1)

Students must complete each of the above requirements for a total of 29 credits to be awarded the Career Studies Certificate in Industrial Controls.

Industrial Maintenance Electronics

Purpose: This program is designed to provide skills and knowledge needed for maintenance and repair of modern production equipment.

Program Learning Outcomes: Graduates will have fundamental skills for installation and repair of electrical systems. Graduates will demonstrate proficiency in electrical codes, OSHA criteria, and system troubleshooting.

ELE	113-114	Electricity I-II (6)
ELE	133	Practical Electricity I (3)
ETR	141	Electronics I (3)
ETR	151	Electronic Circuits and Troubleshooting (2)
ETR	168	Digital Circuits and Fundamentals (3)
ETR	198	Seminar and Project in Troubleshooting (1)

Student must complete the above 18 credits to be awarded the Career Studies Certificate in Industrial Maintenance Electronics.

International Business

Purpose: This program is designed to provide the business professional and entrepreneur with knowledge of international business principles and customs related to business transactions.

Program Learning Outcomes: A student will be able to:

- Demonstrate knowledge of the global business concepts and differences among various countries related to business practices.
- Describe and use general business knowledge and skills, including managerial and supervisory concepts.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.

BUS	116	Entrepreneurship (3)
BUS	280	Introduction to International Business (3)
GEO	210	People & the Land: Intro. to Cult. Geography (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	130	Introduction to Internet Services (3)
MKT	100	Principles of Marketing (3)
MKT	260	Customer Service Management (3)
MKT	275	International Marketing (3)
SDV	108	College Survival Skills (1)
		Foreign Language Elective (3)

Student must complete the above 28 credits to be awarded the Career Studies Certificate in International Business.

Internet Webmaster

Purpose: This program is designed to provide skills and knowledge for employment as a webmaster and certification from CIW as a Certified Internet Webmaster Associate.

Program Learning Outcomes: A student will be able to:

- Demonstrate basic knowledge of Internet fundamentals and technologies.
- Demonstrate skills in basic network infrastructure.
- Demonstrate web authoring fundamentals using XHTML.

CSC	110	Introduction to Computing (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	130	Introduction to Internet Services (3)
ITE	199	Supervised Study-Certification Exam Preparation (3)
ITD	110	Web Page Design I (3)
ITN	101	Introduction to Network Concepts (3)
SDV	108	College Survival Skills (1)

Student must complete the above 19 credits to be awarded the Career Studies Certificate in Internet Webmaster.

Management Assistant

Purpose: This program is designed to provide an individual with basic foundation management skills in the area of general management principles, human resources, communications, psychology, and accounting.

Program Learning Outcomes: A student will be able to:

- Describe and use general business knowledge and skills, including managerial and supervisory concepts.
- Demonstrate ability to reason critically and problem-solve.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.

ACC	211	Principles of Accounting I (3)
BUS	200	Principles of Management (3)
BUS	205	Human Resource Management (3)
CST	110	Introduction to Communication (3)
ENG	111	College Composition I (3)
ENG	112	College Composition II (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
MKT	260	Customer Service Management (3)
MTH	120	Introduction to Mathematics (3)
SDV	108	College Survival Skills (1)

Student must complete the above 28 credits to be awarded the Career Studies Certificate in Management Assistant.

Manufacturing Technician

BUS	195	Business Ethics (1)
ELE	195	Applications in Motor Control (3)
ETR	115	AC/DC Circuits (3)
<i>[or ELE 195 Applications in Basic Electricity(3)]</i>		
<i>[or ELE 195 Mechatronics (3)]</i>		
ITE	102	Computers and Information Systems (2)
IND	195	KeyTrain Remediation (1)
IND	195	Systematic Problem Solving (1)
IND	181	World Class Manufacturing (3)
IND	195	Interpreting Engineering Drawings/ Hand Tolls/Metrology (2)
ITE	195	TekXam Certification (2)
MEC	195	Applications in Fluid Power (2)
MEC	195	Applications in Mechanical Systems (2)
SAF	195	Industrial Safety (1)
SDV	106	Preparation for Employment (1)

Student must complete the above 24 credits to be awarded the Career Studies Certificate in Manufacturing Technician.

Medical Transcription

Purpose: This program is designed to provide skills related to keyboarding, medical office procedures and communications, and the transcription of medical information.

Program Learning Outcomes: A student will be able to:

- Apply medical vocabulary in producing documents used in the health field.
- Document skills in using a keyboard and word processing software for speed and accuracy.

AST	101	Keyboarding I (3)
AST	102	Keyboarding II (3)
AST	141	Word Processing (3)
AST	154	Introduction to Voice Recognition Software (1)
AST	245	Medical Machine Transcription (2)
AST	271	Medical Office Procedures I (3)
ENG	111	College Composition I (3)
HLT	143	Medical Terminology (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
HIM	143	Managing Electronic Billing in a Medical Practice (2)
SDV	108	College Survival Skills (1)

Student must complete the above 27 credits to be awarded the Career Studies Certificate in Medical Transcription.

Microcomputer Literacy

Purpose: This program is designed to provide basic microcomputer literacy skills (terminology, hardware, Internet, email) and knowledge of a word processing, spreadsheet, database, and presentation software package leading to IC3 certification from Certiport, Inc.

Program Learning Outcomes: A student will be able to:

- Document skills related to fundamentals of computer hardware.
- Document skills related to the fundamentals of computer software, including operating systems, word processing, spreadsheet, presentation, and electronic mail software.
- Document skills related to use of the Internet and networks.

CSC	110	Introduction to Computing (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	130	Introduction to Internet Services (3)
ITE	150	Desktop Database Software (3)
ITE	199	Supervised Study-Certification Exam Preparation (3)
SDV	108	College Survival Skills (1)

Student must complete the above 16 credits to be awarded the Career Studies Certificate in Microcomputer Literacy.

Motorsports Engine Technology

Purpose: To provide advanced skills and knowledge in the production of high performance engines to meet workforce needs of race teams and engine manufacturers. Students must score 80 points on the PHCC Fundamental Automotive Technology Skills assessment to enter this program. Students determined to have deficiencies in Fundamental Automotive Skills will complete additional course work. Students must maintain a 2.5 Curriculum Grade Point Average to stay in the program. Tools for program are required.

Program Learning Outcomes: Graduates will have fundamental skills for race car component installation and repair. Graduates

will demonstrate proficiency tear-down, component assessment, parts selection, and reassembly of a race engine.

MTS	126	Motorsports Technology II (3)
MTS	140	Stock Car Engines I (3)
MTS	150	Engine Machining Processes I (4)
MTS	195	High Performance Engine Induction Systems (3)
MTS	240	Stock Car Engines II (3)
MTS	250	Engine Machining Processes II (3)
MTS	290	Coordinated Internship (2)
MTS	295	Introduction to Pit Stop (2)
MTS	298	DYNO Engine Performance (3)
SDV	108	College Survival Skills (1)

Student must complete the above 27 credits to be awarded the Career Studies Certificate in Motorsports Engines Technologies.

Motorsports Fabrication and Set Up Technology

Purpose: To provide advanced skills and knowledge in the production of round track race cars to meet workforce needs of race teams. Students must maintain a 2.5 Curriculum Grade Point Average to stay in the program.

Program Learning Outcomes: Graduates will have fundamental skills for race car component installation and repair. Graduates will demonstrate proficiency structural alignment, vehicle set up for prescribed environments, and adjustment to track conditions.

MTS	130	Motorsports Structural Technology (3)
MTS	131	Motorsports Structural Technology II (3)
MTS	132	Motorsports Structural Technology III (3)
MTS	135	Sheet Metal Fabrication (3)
MTS	210	Race Car Setup I (3)
MTS	211	Race Car Setup II (3)
MTS	290	Coordinated Internship (2)
MTS	295	Introduction to Pit Stop (2)
MTS	295	Machine Welding (3)
MTS	298	Race Car Setup III (3)
SDV	108	College Survival Skills (1)

Students must complete the above 29 credit hours to be awarded the Career Studies Certificate in Motorsports Fabrication and Set Up Technology.

Motorsports Management

Purpose: This program is designed to give specialized skills related to the management of a motorsports-related business. Students must maintain a 2.5 Curriculum Grade Point Average to stay in the program.

BUS	200	Principles of Management (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
MKT	100	Principles of Marketing (3)
MKT	260	Customer Service Management (3)

MTS	100	Introduction to Motorsports Management (3)
MTS	110	Introduction to Motorsports Marketing (3)
MTS	125	Motorsports Technology I (3)
MTS	190	Coordinated Internship (3)
MTS	298	Projects in Motorsports Marketing (3)
SDV	108	College Survival Skills (1)

Students must complete the above 28 credits to be awarded the Career Studies Certificate in Motorsports Management.

Nurse Aide Training

Purpose: This program is designed to provide skills and knowledge to prepare the student to take the certification test as a certified Nurse Aide in Virginia. Developmental pre-requisites are: ENF 1, and ENF 1 and 2 for required HLT class. Students must pass a criminal background check and drug screen to be eligible for clinical experiences.

HCT	101	Health Care Technician I (4)
HCT	102	Health Care Technician II (4)
HCT	110	Therapeutic Communication in the Health Care Setting (3)
HLT	100	First Aid and Cardiopulmonary Resuscitation (3)
ITE	95	Introduction to Microcomputers (2)
SDV	108	College Survival Skills (1)

Financial Requirements: In addition to the usual college tuition and fees, this program requires additional expenses.

Approximate costs include:

- \$30/\$50 – Uniform
- \$30+ - Shoes
- \$10+ - Watch
- \$100 (approximate) – Physical Examination & TB skin test
- \$40 – Textbook/Workbook
- \$91 – Criminal Background Check (minimum cost)
- \$40/\$50 – Drug Screen
- \$95 – Certification Exam
- Transportation to clinical agencies as required

Student must complete each of the above requirements for a total of 17 credits to be awarded the Career Studies Certificate in Nurse Aide Training.

Office Assisting

Purpose: This program is designed to provide skills in preparation for a job as an office assistant requiring tasks related to keyboarding, records management, office administration, writing, and computer use.

Program Learning Outcomes: A student will be able to:

- Demonstrate proficiency in personal computer operations and applications.
- Demonstrate various methods of filing in storing and retrieving documents both manually and electronically.
- Produce a variety of business documents using correct

grammar, punctuation and spelling in a form acceptable in today's business environment.

AST	101	Keyboarding I (3)
AST	102	Keyboarding II (3)
AST	113	Keyboarding for Speed and Accuracy (1)
[or AST 154		Introduction to Voice Recognition Software (1)]
AST	141	Word Processing (3)
AST	234	Records and Database Management (3)
AST	243	Office Administration I (3)
ENG	111	College Composition I (3)
ENG	112	College Composition II (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
SDV	108	College Survival Skills (1)
Approved Elective (3)		

Student must complete the above 29 credits to be awarded the Career Studies Certificate in Office Assisting.

Pharmacy Technician

Purpose: This program is designed to prepare personnel to perform skilled duties and to assist the pharmacist-in-charge. Some examples of job duties include: computer information entry, preparation of prescription labels, assisting the pharmacists in filling prescriptions, ordering pharmaceuticals and supplies, and customer assistance.

Students need to place out of developmental reading and algebra on the college placement test or have successfully completed those courses before registering for any of the required HLT or NUR courses.

Prior to registering for HLT 190, students are required to undergo mandatory drug screening and criminal background checks. Students must have a negative drug screen and criminal background check in order to begin pharmacy tech clinical experiences. The cost of drug screening and criminal background checks are the responsibility of the student. Drug screening cost range from \$40-\$50 and criminal background screening has a minimum cost of \$91.

ITE	95	Introduction to Microcomputers (2)
HCT	110	Therapeutic Communication in Health Care Setting (3)
HLT	190	Coordinated Internship (5)
HLT	143	Medical Terminology (3)
HLT	261	Basic Pharmacy I (3)
HLT	262	Basic Pharmacy II (3)
MTH	126	Math for Allied Health (3)
NUR	135	Drug Dosage Calculations (2)
NUR	230	Pharmacology (3)
SDV	108	College Survival Skills (1)

Students must complete the above 28 credit hours to be awarded the Career Studies Certificate in Pharmacy Technician.

Residential/Commercial/ Industrial Electrician

Purpose: This program is designed to provide skills for entry-level positions in the practice of electrical servicing.

Program Learning Outcomes: Graduates will have fundamental skills for entry level electrical installation and repair. Graduates will demonstrate proficiency in electrical codes, OSHA safety criteria, and wiring circuits.

ELE	113-114	Electricity I-II (6)
ELE	110	Home Electric Power: Residential (3)
ELE	133	Practical Electricity I: Commercial (3)
ELE	134	Practical Electricity II: Industrial (3)
ELE	138	National Electrical Code (2)
ELE	239	Programmable Controllers (3)

Student must complete each of the above classes for a total of 20 credits to be awarded the Career Studies Certificate in Residential/Commercial/Industrial Electrician.

School-Age Child Care

Purpose: This program is designed to meet the training needs of students who want to work with school-age children, age 5-12, in before- and after-school programs. The curriculum also offers an organized course of study for those who wish to increase their knowledge and understanding of child development.

Program Learning Outcome: Graduates will have fundamental skills for entry level classroom assistance. Graduates will demonstrate proficiency in education methods, instructional technology, presentations, and lesson planning.

CHD	125	Creative Activities (3)
CHD	220	Introduction to School-Age Child Care (3)
CHD	225	Curriculum Development for School-Age Child Care (3)
CHD	230	Behavior Management for School-Age Child Care (3)
CHD	235	Health and Recreation for School-Age Child Care (3)
CHD	270	Administration of Childcare Programs (3)
ENG	111	College Composition I (3)
HLT	100	First Aid and Cardiopulmonary Resuscitation (3)
PSY	135	Child Care Psychology (3)
SDV	108	College Survival Skills (1)

Students must complete the above 28 credit hours to be awarded the Career Studies Certificate in Child Care.

Small Business Management

Purpose: This program is designed to provide an entrepreneur with skills in establishing and maintaining a successful small business.

Program Learning Outcomes: A student will be able to:

- Explain the importance of entrepreneurial behavior and describe the characteristics of successful entrepreneurs.
- Demonstrate the ability to plan and development of a comprehensive business plan.

ACC	134	Small Business Taxes (3)
BUS	116	Entrepreneurship (3)
BUS	160	Legal Aspects for Small Business Operations (1)
BUS	165	Small Business Management (3)
ENG	111	College Composition I (3)
FIN	260	Financial Management for Small Business (2)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	140	Spreadsheet Software (3)
MKT	160	Marketing for Small Business (3)
MKT	260	Customer Service Management (3)
SDV	108	College Survival Skills (1)

Student must complete the above 28 credits to be awarded the Career Studies Certificate in Small Business Management.

Supervision

Purpose: This program is designed to provide the business professional with skills related to the effective supervision of personnel.

Program Learning Outcomes: A student will be able to:

- Describe and use general business knowledge and skills, including managerial and supervisory concepts.
- Demonstrate accepted ethical behaviors and interpersonal skills that reflect an understanding of diversity and teamwork.
- Describe contemporary approaches to management and methods to create a positive work environment.

BUS	111	Principles of Supervision I (3)
BUS	112	Principles of Supervision II (3)
BUS	200	Principles of Management (3)
BUS	205	Human Resource Management (3)
CST	110	Introduction to Communication (3)
ENG	111	College Composition I (3)
ITE	115	Intro. to Computer Applications & Concepts (3)
ITE	130	Introduction to Internet Services (3)
MKT	260	Customer Service Management (3)
SDV	108	College Survival Skills (1)

Student must complete the above 28 credits to be awarded the Career Studies Certificate in Supervision.

Theatre Arts

Purpose: This program is designed to provide skills specifically related to acting and stage design.

Program Learning Outcomes: A student will be able to:

- Demonstrate competency in at least one aspect of theatre acting.
- Demonstrate competency in at least one area related to theatre production.

CST	110	Introduction to Communication (3)
CST	131	Acting I (3)
CST	132	Acting II (3)
CST	136	Theatre Workshop (6)
CST	231	History of the Theatre I (3)
<i>[or CST 130 Introduction to the Theatre (3)]</i>		
SDV	108	College Survival Skills (1)

Student must complete the above 19 credits to be awarded the Career Studies Certificate in Theater Arts.

Viticulture

Purpose: The purpose of this program is to provide skills and experience that may be applied to a rapidly expanding grape industry in the eastern portion of the country. The grape industry is centered in the western portion of the U.S. and their conditions vary greatly from those in the east. Students will gain insight into conditions and problems that face eastern growers and prepare themselves for jobs as vineyard workers, vineyard managers, winery personnel, and retail sales specialist. Applicants must meet placement requirements of ENF 3 or above, and MTE 1-3.

VEN	100	Introduction to Viticulture (3)
VEN	110	Vineyard Establishment (3)
VEN	120	Viticulture I (3)
VEN	121	Viticulture II (3)
VEN	125	Vineyard Management (3)
VEN	130	Introduction to Winemaking (3)
VEN	135	Wine Production (3)
VEN	140	Grape Pest and Disease Management (3)
VEN	190	Coordinated Internship (3)

Students must complete the above 27 credits to be awarded the Career Studies Certificate in Viticulture.

Welding

Purpose: This program is designed to provide the layman and practitioner fundamental skills and knowledge in metal trades.

Program Learning Outcomes: Graduates will have fundamental skills for entry level weld installations. Graduates will demonstrate proficiency in oxyacetylene processes, arc and MIG welding procedures.

WEL	117	Oxyacetylene Welding and Cutting (3)
WEL	123	ARC Welding (Basic) (4)
WEL	124	ARC Welding (Advanced) (4)
WEL	130	Inert Gas Welding (3)
WEL	145	Welding Metallurgy (3)
WEL	150	Welding Drawing and Interpretation (2)

Student must complete each of the 19 credits to be awarded the Career Studies Certificate in Welding.

Wellness

Purpose: This program is designed to provide skills related to physical fitness and wellness and an understanding of human development.

Program Learning Outcomes: A student will be able to:

- Develop a strategy for lifetime fitness.
- Describe consequences of daily choices related to the development of mind and body.

HLT	100	First Aid and Cardiopulmonary Resuscitation (3)
HLT	116	Personal Wellness (3)
HLT	121	Introduction to Drug Use and Abuse (3)
HLT	200	Human Sexuality (3)
HLT	204	Women's Health (3)
HLT	230	Principles of Nutrition & Human Development (3)
PED	101	Fundamentals of Physical Activity I (1)
PED	102	Fundamentals of Physical Activity II (1)
PED	109	Yoga (1)
PSY	230	Developmental Psychology (3)
SDV	108	College Survival Skills (1)

Student must complete the above 25 credits to be awarded the Career Studies Certificate in Wellness.