Career and Technical Program Outlines

ACCOUNTING ASSISTANT

A.A.S. Degree, Certificate: SCC

As a paraprofessional in the accounting field, the accounting assistant analyzes and interprets the essential information about the operations of a business and contributes vitally to important policies and decisions.

An accounting assistant should have above-average aptitude for working with numbers and the ability to concentrate and communicate. Accounting affords a continuing challenge to creative, alert minds.

Students who successfully complete this course will be able to

■ Analyze financial data and prepare statistical comparisons for use in the budgeting process.

■ Assist in determination of inventory order quantities, cash requirements, capital investment decisions, and break-even analysis.

■ Use various types of office machines.

■ Post and/or supervise the posting of accounts receivable and payable

■ Help maintain data processing applications of routine accounting systems

■ Have a basic comprehension of business operations, a knowledge of business vocabulary, and an understanding of economic systems

■ Prepare monthly, quarterly or annual business and payroll tax reports

■ Process payroll related transactions

Students will receive an Accounting Clerk certificate after completing the first three quarters of the A.A.S. degree. All students graduating from this program must have a minimum grade of 2.0 on each of the Accounting, Economic and General Business required courses. Students must also have a 2.0 cumulative minimum grade point average on all required courses in this program.

This degree is non-transferable to a four-year university. Students working toward the associate of arts degree for transfer to a four-year institution should consult individually with an adviser or counselor for planning the A.A. degree program. For information on A.A. degree requirements, refer to the Degree and Certificate Requirements section of the CCS catalog. More information on specific transfer programs can be found in the Academic Programs section of the CCS catalog.

FIRST YEAR

First Quarter

ACCT	151	College Accounting I[1]	5
CATT	120	Microsoft Word I	2.5
CATT	138	Microsoft Excel I	2.5
GBUS	101	Introduction to Business	5
		Total	**15**

Second Quarter

ACCT	152	College Accounting II[1]	5
CATT	139	Microsoft Excel II	2.5
CATT	190	Introduction to PowerPoint	2.5
GBUS	104	Business Mathematics	5
		Total	**15**

Third Quarter

ACCT	141	QuickBooks	5
ACCT	161	Payroll Procedures	4
ACCT	162	Business Tax Accounting	1
BT	109	Business Communications	5
		Total	**15**

SECOND YEAR

Fourth Quarter

ACCT	142	Advanced QuickBooks	5
ACCT	212	Accounting Applications and Analysis[2]	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
		Total	**15**

Fifth Quarter

ACCT	204	Governmental/Not-For-Profit	5
GBUS	280	Human Relations in Business	5
		Business Electives	5
		Total	**15**

Sixth Quarter

ACCT	218	Accounting Analysis Simulation	1
ACCT	288	Cooperative Education Work Experience (No Seminar)	2
ECON	100	Fundamentals of Economics	5
GBUS	205	Business Law	5
		Business Electives	2
		Total	**15**

90 credits are required for an A.A.S. degree and 45 credits are required for a certificate.

[1] These courses may be substituted with ACCT 101 and 102.
[2] This course may be substituted with ACCT 105.

ADMINISTRATIVE ASSISTANT

A.A.S. Degree: SCC

The administrative assistant program combines a well-balanced academic program with expert secretarial instruction giving students the diversified training and background needed to hold positions of responsibility and importance in many areas of the business world. This program helps raise the office skills of students to a professional level, gives students a technical background through completion of technical skill courses and an academic background, provides students a mature understanding of professional responsibilities, and provides for minimum additional on-the-job training.

FIRST YEAR

First Quarter

BT	090	Basic Grammar for Business II	5
BT	102	Document Processing	5
BT	151	Business Student Preparation	5
		Total	**15**

Second Quarter

BT	109	Business Communications	5
BT	165	Word Processing	5
CATT	102	Introduction to Outlook	2.5
GBUS	103	Basic Business Math and Electronic Calculators	5
		Total	**17.5**

Third Quarter[1]

BT	160	Job Preparation Techniques	3
BT	231	Office Procedures	5
BT	235	Machine Transcription	5
MMGT	223	Customer Service	3
		Total	**16**

SECOND YEAR

Fourth Quarter

ACCT	101	Principles of Accounting OR	
ACCT	151	College Accounting I	5
BT	201	Information Processing	5
BT	272	Business Correspondence	5
		Total	**15**

Fifth Quarter

BT	202	Advanced Information Processing	5
BT	250	Information Technology	5
BT	260	Administrative Office Management	5
		Elective[2]	5
		Total	**20**

Sixth Quarter

BT	263	Integrated Office Applications	5
BT	285	Administrative Professional Internship	2
CATT	128	Desktop Publishing	5
CATT	241	Project Management Applications	2.5
MMGT	242	Project Management	2.5
		Total	**17**

100.5 credits are required for an A.A.S. degree.

[1] *To enter the third quarter of this program, students must pass competency tests in the following areas:*
- *Math (fractions, percentages, etc.)*
- *Writing (write a basic letter, memo, and/or e-mail with correct spelling, punctuation, grammar, etc.)*
- *Format documents from unarranged copy in a timed situation (letters, memos, reports, tables) using Word.*
- *Keyboarding proficiency of 40 wpm.*

[2] *This elective may be ACCT 141, GBUS 204, 205, 280 or SPCH 102.*

ADMINISTRATIVE/COMPUTER SPECIALIST

A.A.S. Degree: SFCC

This curriculum is designed to prepare students for careers as management information specialists, salespersons for vendors or retailers of microcomputer hardware and software, or technical support specialists. The beginning classes provide students with basic computer processing concepts and skills, along with necessary related accounting, management and communication skills. The advanced classes develop skills in microcomputer applications for business systems, operating systems and local area networks. Topics include programming, system software concepts, using applications packages, data base concepts, telecommunications and support of end users.

FIRST YEAR

First Quarter

BT	101	Keyboarding[1]	5
BT	107	Business Communications[2]	3
CAPPS	104	Windows	1
GBUS	102	Math Skills for Business[3]	3
IS	120	Business Computer Use	3
		Total	**15**

Second Quarter

BT	108	Business Communications[2]	3
CAPPS	110	Word	3
CAPPS	120	Outlook	2
IS	142	Hardware Fundamentals	3
IS	143	Operating System Fundamentals	2
IS	144	Programming Fundamentals	3
IS	160	Internet Fundamentals	1
		Total	**17**

Third Quarter

ACCT	101	Principles of Accounting[4]	5
CAPPS	112	Excel	3
CAPPS	114	Access	3
GBUS	280	Human Relations in Business OR	
HS	136	Improving Interpersonal Communication	5
GRDSN	158	PhotoShop I	2
		Total	**18**

SECOND YEAR

Fourth Quarter

BT	257	Presentation Graphics/Publishing	3
BT	272	Business Correspondence	5

GRDSN	126	Web Production	2
IS	162	Data Communications and Networks	3
IS	210	Internet Programming I	3
		Total	**16**

Fifth Quarter

BT	255	Business Productivity Tools	3
BT	260	Administrative Office Management	5
IS	164	Network Management	5
		Elective	2
		Total	**15**

Sixth Quarter

BT	160	Job Preparation Techniques	3
BT	201	Information Processing	5
BT	285	Administrative Professional Internship	2
		Elective	4
		Total	**14**

95 credits are required for an A.A.S. degree.

See department for listing of approved electives.

[1] *Students may take BT 102 if they possess keyboarding skills at 35 wpm and knowledge of business document formatting. Permission of instructor recommended.*

[2] *ENG 101 may be substituted.*

[3] *GBUS 103 may be substituted.*

[4] *Students may take ACCT 103 (3 credits) AND two credits of approved accounting credits. Permission of instructor.*

ADMINISTRATIVE OFFICE MANAGEMENT

A.A.S. Degree: SCC

The administrative office management program prepares students to manage functions in the office environment. This program is recommended to experienced office staff as well as entry-level office workers who are looking to increase their potential for promotion. Graduates will have expert office skills and in-depth software knowledge. The program provides training in office information systems, work process and organizational performance improvement, human relations, business communications, business decision making, project management, and human resource management.

FIRST YEAR

First Quarter

BT	102	Document Processing	5
BT	109	Business Communications	5
CATT	102	Introduction to Outlook	2.5
GBUS	103	Basic Business Math and Electronic Calculators	5
		Total	**17.5**

Second Quarter

BT	165	Word Processing	5
BT	231	Office Procedures	5
SPCH	102	Interpersonal Communication	5
		Total	**15**

Third Quarter[1]

ACCT	101	Principles of Accounting OR	
ACCT	151	College Accounting I	5
BT	201	Information Processing	5
GBUS	280	Human Relations in Business	5
		Total	**15**

SECOND YEAR

Fourth Quarter

BT	202	Advanced Information Processing	5
BT	272	Business Correspondence	5
GBUS	204	Introduction to Law OR	
GBUS	205	Business Law	5
MATH	201	Introduction to Finite Mathematics	5
		Total	**20**

Fifth Quarter

BT	160	Job Preparation Techniques	3
BT	250	Information Technology	5
BT	260	Administrative Office Management	5
CATT	241	Project Management Applications	2.5
MMGT	242	Project Management	2.5
		Total	**18**

Sixth Quarter

BT	263	Integrated Office Applications	5
BT	285	Administrative Professional Internship	2
CATT	128	Desktop Publishing	5
MMGT	231	Human Resource Management	5
		Total	**17**

102.5 credits minimum are required for an A.A.S. degree.

[1] *To enter the third quarter of this program, students must pass competency tests in the following areas:*
- *Math (fractions, percentages, etc.)*
- *Writing (write a basic letter, memo and/or e-mail with correct spelling, punctuation, grammar, etc.)*
- *Format documents from unarranged copy in a timed situation (letters, memos, reports and tables) using Word.*
- *Keyboarding proficiency of 40 wpm.*

ADMINISTRATIVE SECRETARY

A.A.S. Degree: SFCC

At the core of almost every business are administrative support personnel. Students will gain proficiency in computer and Windows applications, learn the latest electronic communication tools, acquire speed and accuracy on the keyboard, and learn office procedures essential in today's business environment.

Students completing this degree will be competent in the following areas: taking notes at meetings and preparing minutes, oral and written communications, document formatting, basic accounting procedures, machine transcription, records management, office procedures, desktop publishing and spreadsheeting. Students will complete capstone courses which will integrate classroom learning into "real-world" office situations.

Students will have the opportunity to bridge the gap between the classroom and the working world by participating in a work experience internship as well as model office simulations. Students may begin in entry-level positions as front office professionals and work their way up to higher paying administrative secretaries, administrative assistants, or office managers.

FIRST YEAR

First Quarter

BT	101	Keyboarding[1]	5
BT	107	Business Communications[2]	3
GBUS	102	Math Skills for Business[3]	3
GENST	106	College Success	3
IS	160	Internet Fundamentals	1
		Total	**15**

Second Quarter

ACCT	103	Fundamental Bookkeeping Procedures	3
BT	102	Document Processing	5
BT	108	Business Communications[2]	3
BT	170	WordPerfect [1]	2
CAPPS	114	Access	2
		Total	**15**

Third Quarter

BT	103	Formatting	5
BT	155	Records Information Management	3
BT	231	Office Procedures	5
BT	272	Business Correspondence	5
		Total	**18**

SECOND YEAR

Fourth Quarter

BT	232	Office Procedures II	5
BT	235	Machine Transcription	5
BT	257	Presentation Graphics/Publishing	3
CAPPS	112	Excel	1
CAPPS	120	Outlook	2
		Total	**16**

Fifth Quarter

BT	255	Business Productivity Tools	3
BT	260	Administrative Office Management	5
GBUS	280	Human Relations in Business OR	
HS	136	Improving Interpersonal Communication	5
		Approved Electives	4
		Total	**17**

Sixth Quarter

BT	160	Job Preparation Techniques	3
BT	201	Information Processing	5
BT	234	Administrative Professional Practicum	5
BT	285	Administrative Professional Internship	2
		Total	**15**

96 credits are required for an A.A.S. degree.

See department for listing of approved electives.

[1] *Students may take BT 102 if they possess keyboarding skills at 35 wpm and knowledge of business document formatting. Permission of instructor recommended.*

[2] *ENG 101 may be substituted.*

[3] *GBUS 103 may be substituted.*

AGRICULTURE TECHNOLOGY

A.A.S. Degree, Certificate: SCC

The agriculture technology program is designed to train students for entry-level employment in the agricultural chemical and fertilizer industry as well as grain and farming operations. Program graduates are qualified for advancement into sales, service, field representative and branch management positions.

FIRST YEAR

First Quarter[1]

AGHRT	104	Principles of Pest Management	5
AGHRT	116	Green Industry Management	5
AGHRT	126	Computer Essentials for Environmental Sciences	2
AGHRT	171	Agricultural Leadership Training	1
APLED	112	Applied Mathematics[2]	3
		Total	**16**

Second Quarter[3]

AGGEN	151	Agriculture Shop Skills	4
AGGEN	156	Equipment Operation and Maintenance	5
AGHRT	101	Basic Crop Science	5
AGHRT	102	Pesticides and Application Equipment	5
AGHRT	172	Agricultural Leadership Training	1
		Total	**20**

Third Quarter[4]

APLED	121	Applied Written Communication[2]	4
ENVSC	210	Environmental Soil Science	5
NATRS	204	Maps and Aerial Photo Interpretation	5
		Total	**14**

Fourth Quarter (summer)[5]

AGHRT	266	Cooperative Education Seminar	1
AGHRT	267	Cooperative Education Work Experience	7
		Total	**8**

SECOND YEAR

Fifth Quarter[1]
AGHRT 230 Plant Problem Diagnosis 5
AGHRT 232 Pest Management Project 2
ENVSC 110 Plant Biology 5
WATER 109 Introduction to Water Resources 5
Total 17

Sixth Quarter[3]
AGGEN 154 Small Engine Operation and Maintenance 4
AGHRT 219 Soil Management and Fertility 5
NATRS 220 Introduction to Geographic Information Systems for
Natural Resources 4
NATRS 230 Global Positioning Systems 3
Total 16

Seventh Quarter[4]
AGHRT 225 Weed Biology and Control 5
ENVSC 218 Environmental Science Conservation Planning 3
GBUS 280 Human Relations in Business 5
NATRS 221 Applications in Geographic Information Systems 5
Total 18

Certificate

The agriculture technology program is designed to train students for entry-level employment in the agricultural chemical and fertilizer industry as well as grain and farming operations.

First Quarter[1]
AGHRT 104 Principles of Pest Management 5
AGHRT 116 Green Industry Management 5
AGHRT 126 Computer Essentials for Environmental Sciences 2
AGHRT 171 Agricultural Leadership Training 1
APLED 112 Applied Mathematics[2] 3
Total 16

Second Quarter[3]
AGGEN 151 Agriculture Shop Skills 4
AGGEN 156 Equipment Operation and Maintenance 5
AGHRT 101 Basic Crop Science 5
AGHRT 102 Pesticides and Application Equipment 5
AGHRT 172 Agricultural Leadership Training 1
Total 20

Third Quarter[4]
APLED 121 Applied Written Communication[1] 4
ENVSC 210 Environmental Soil Science 5
Elective[6] 5
Total 14

109 credits are required for the A.A.S. degree and 50 credits are required for a certificate.

[1] These courses may be offered fall quarter only.
[2] This related education requirement may be met by any course or combination of courses approved by the instructional dean.
[3] These courses may be offered winter quarter only.
[4] These courses may be offered spring quarter only.
[5] These courses may be offered summer quarter only.
[6] The elective must be approved by the instructional dean.

Spray Technician Certificate

SCC's one-quarter Spray Technician Certificate Program is designed to provide entering students or currently employed individuals with the skills needed to succeed in an entry-level position applying pesticides and fertilizers in landscape maintenance and agrichemical industries.

AGGEN 156 Equipment Operation and Maintenance[1] 5
AGHRT 102 Pesticides and Application Equipment[1] 5
AGHRT 104 Principles of Pest Management 5
Total 15

15 credits are required for a certificate.

[1] This course may be offered fall and winter quarters only.

Small Equipment Repair Specialist Certificate

SCC's new one-quarter Small Equipment Repair Specialist is designed to provide entering students or currently employed individuals with the skills needed to succeed in an entry-level position maintaining and repairing a variety of small electric or gas-driven equipment used in landscape maintenance and agrichemical industries.

AGGEN 152 Arc Welding 4
AGGEN 153 Oxy-acetylene Welding 4
AGGEN 154 Small Engine Operation and Maintenance[1] 4
AGGEN 156 Equipment Operation and Maintenance[2] 5
Total 17

17 credits are required for the certificate.

[1] This course may be offered winter quarter only.
[2] This course may be offered fall and winter quarters only.

ARCHITECTURAL TECHNOLOGY

A.A.S. Degree: SCC

The first year consists of line construction, lettering, architectural symbols, orthographic projections, freehand sketching, isometric pictorial drawing, light construction principles and use of drafting expressions. Additional emphasis is placed on architectural detailing which consists of drawing wall sections, window and door schedules, fireplace design and details, stair design and details, footings and foundations, floor plans, and framing plans. Utilization of the above is finalized in the development of residential working drawings of varying degrees of complexity.

The second year consists of architectural working drawings for commercial applications developed from a preliminary design; drafting techniques, standards and practices of the profession, including office procedure knowledge and use of building materials; structural framing systems as used in the building industry; and related engineering technical courses.

FIRST YEAR

First Quarter
ARCHT 112 Introduction to Architectural Drafting 7
ARCHT 114 Architectural Math 3
ARCHT 120 Residential Architecture Theory 3
ARCHT 126 Introduction to Computer Aided Drafting 5
Total 18

Second Quarter
ARCHT 122 Basic Residential Drafting 7
ARCHT 124 Advanced Architectural Math 2
ARCHT 130 Residential Building Materials 4
ARCHT 134 Electrical and Mechanical Systems 3
ARCHT 139 Delineation 4
Total 20

Third Quarter
APLED 121 Applied Written Communication[1] 4
ARCHT 125 Residential Building Codes 2
ARCHT 132 Advanced Residential Drafting/CAD 7
ARCHT 138 CAD Applications 5
Total 18

SECOND YEAR

Fourth Quarter
APLED 123 Leadership Skills for Business and Industry[1] 3
ARCHT 240 Commercial Building Codes 3
ARCHT 242 Introduction to Commercial Drafting/CAD 8
ARCHT 246 Commercial Architecture Theory 3
Total 17

Fifth Quarter
APLED 125 Employment Preparation[1] 3
ARCHT 250 Introduction to Commercial Building Materials 4
ARCHT 251 Advanced Commercial Building Codes 3
ARCHT 252 Basic Commercial Drafting/CAD 8
Total 18

Sixth Quarter

ARCHT   196   Special Problems[2] 4
ARCHT   262   Advanced Commercial Drafting/CAD[2] 10
ARCHT   263   Advanced Commercial Building Materials 4
                   Total **18**

109 credits are required for an A.A.S. degree.

[1]   *This related education requirement may be met by any combination of courses*
     approved by the instructional dean.
[2]   *ARCHT 266 and 267 or 288 (no seminar) may be substituted for one or more*
     of these courses with permission of the instructor.

AUDIO TECHNOLOGY

A.A.S. Degree, Certificate: SFCC

The objective of this program is to prepare students for entry-level jobs and for self employment in the entertainment industry in the areas of digital/audio production, recording/live sound engineering, broadcast technicians and audio equipment technicians.

The certificate and first year of the AAS degree provides a basic understanding of the music technology/audio engineering field. Students learn principles and procedures of studio recording, CD production and live sound reinforcement. They also receive an introduction to state of the art software programs specific to the digital recording industry. The first year also includes basic music theory, piano keyboard skills and the business aspects of the music industry.

The second year of the AAS degree provides advance study and implementation of the above as well as intensive study of the ProTools operating system. Students will pursue more specialized tracks in areas such as studio recording, CD production, live sound reinforcement and Musical Instrument Digital Interface (MIDI)/digital technologies.

FIRST YEAR

First Quarter

MUSIC   101   Music Theory I OR
MUSIC   116   Music Basics for Audio Professionals 5
MUSIC   117   Introduction to Music Technology 5
MUSIC   155   Introduction to Recording 5
MUSIC   166   Functional Piano I OR
MUSIC   180   Private Lessons 1-2
                   Total **16-17**

Second Quarter

BT   107   Business Communications 3
GBUS   102   Math Skills for Business 3
MUSIC   110   Contemporary Harmony 3
MUSIC   113   Live Sound and Location Recording I 3
MUSIC   118   MIDI Sequencing I 2
MUSIC   120   Digital Audio I 3
MUSIC   167   Functional Piano II OR
MUSIC   180   Private Lessons 1-2
                   Total **18-19**

Third Quarter

MUSIC   119   MIDI Sequencing II 2
MUSIC   121   Digital Audio II 3
MUSIC   156   Audio Engineering I 5
MUSIC   159   Business of Music 5
MUSIC   209   Demo CD Production 4
                   Total **19**

SECOND YEAR

Fourth Quarter

MUSIC   214   Contemporary Harmony II/Songwriting 5
MUSIC   217   System Setup and Maintenance 3
MUSIC   218   Digital Audio III 5
MUSIC   255   Audio Engineering II 5
                   Total **18**

Fifth Quarter

MUSIC   205   MIDI Arranging 5
MUSIC   213   Live Sound 4

MUSIC   219   Digital Audio IV 5
                   Related Education Elective 3-5
                   Total **17-19**

Sixth Quarter

MUSIC   206   Film Scoring OR
MUSIC   256   Audio Engineering Workshop 5
MUSIC   220   Digital Audio V 5
MUSIC   259   Business of Music II 5
                   Related Education Elective 3-5
                   Total **18-20**

106-112 credits are required for an A.A.S. degree.

RELATED INSTRUCTION ELECTIVES:

BT   108   Business Communications 3
BT   272   Business Correspondence 5
ENG   101   English Composition 5
ENG   205   Technical Writing 5
GBUS   103   Basic Business Math and Electronic Calculators 5
GBUS   104   Business Mathematics OR
GBUS   105   Principles of Leadership 3
GBUS   280   Human Relations in Business 5
HS   136   Improving Interpersonal Communication 5
                   Any Math Course 099 or above 5

Certificate

First Quarter

MUSIC   101   Music Theory I OR
MUSIC   116   Music Basics for Audio Professionals 5
MUSIC   117   Introduction to Music Technology 5
MUSIC   155   Introduction to Recording 5
MUSIC   166   Functional Piano I OR
MUSIC   180   Private Lessons 1-2
                   Total **16-17**

Second Quarter

BT   107   Business Communications 3
GBUS   102   Math Skills for Business 3
MUSIC   110   Contemporary Harmony 3
MUSIC   113   Live Sound and Location Recording I 3
MUSIC   118   MIDI Sequencing I 2
MUSIC   120   Digital Audio I 3
MUSIC   167   Functional Piano II OR
MUSIC   180   Private Lessons 1-2
                   Total **18-19**

Third Quarter

MUSIC   119   MIDI Sequencing II 2
MUSIC   121   Digital Audio II 3
MUSIC   156   Audio Engineering I 5
MUSIC   159   Business of Music 5
MUSIC   209   Demo CD Production 4
                   Total **19**

53-55 credits are required for the certificate.

AUTOMOTIVE COLLISION
AND REFINISHING TECHNICIAN

A.A.S. Degree: SCC

The automotive collision and refinishing technician program teaches skills including metalwork, glasswork, refinishing, and welding. Instruction is primarily by demonstration and individual help in a shop situation where field conditions are simulated. This includes wire feed; plastic repair; a study of basic hand tools and their uses; basic metal straightening techniques; use of modern shop equipment; and basic refinishing methods. The advanced portion of the course involves practical applications in metal straightening; body and panel alignment; frame and chassis repair; and body repair including both major damage and miscellaneous repair. Modern refinishing and paint techniques are included.

A comprehensive study of automobile refinishing, material damage estimating, insurance procedures, and shop procedures is emphasized.

FIRST YEAR

First Quarter

ABF	113	Introduction to Job Safety, Tools, and Equipment	4
ABF	114	Introduction to Unibody and Frame Alignment and Repair	4
ABF	115	Basic Metal Straightening and Panel Alignment	4
ABF	116	Introduction to Estimating and Parts Identification	4
ABF	117	Automotive Collision MIG Welding	1
CIS	105	Computer Fundamentals for Vocations I	2
		Total	**19**

Second Quarter

ABF	243	Advanced Unibody and Frame Alignment and Repair	6
ABF	244	Advanced Metal Straightening and Panel Alignment Methods	5
ABF	245	Estimating Applications	5
APLED	112	Applied Mathematics[1]	3
		Total	**19**

Third Quarter

ABF	133	Introduction to Industrial Safety and Hygiene	3
ABF	134	Introduction to Interior and Exterior Surface Preparation	4
ABF	135	Basic Polishing and Detailing	3
ABF	136	Introduction to Topcoat Systems and Application Procedures	3
ABF	137	Basic Color Matching and Paint Mixing Fundamentals	3
APLED	125	Employment Preparation[1]	3
		Total	**19**

SECOND YEAR

Fourth Quarter

ABF	263	Advanced Interior and Exterior Surface Preparation	4
ABF	264	Advanced Paint Application, Color Matching, and Paint Mixing	4
ABF	265	Materials and Cost Estimation	3
ABF	268	Advanced Finessing, Compounding, and Detailing	5
MMGT	205	Small Business Planning[1]	5
		Total	**21**

Fifth Quarter

ABF	123	Introduction to Major Panel Replacement	5
ABF	124	Introduction to Mechanical Components	3
ABF	125	Introduction to Major Unibody and Frame Repair	5
ABF	126	Fundamentals of Shop Procedures	3
APLED	121	Applied Written Communication[1]	4
ISFTY	111	Industrial First Aid	2
		Total	**22**

Sixth Quarter

ABF	253	Intermediate Major Panel Replacement Applications	6
ABF	254	Intermediate Mechanical Components Applications	4
ABF	255	Intermediate Major Unibody and Frame Methods	6
APLED	123	Leadership Skills for Business and Industry	3
		Total	**19**

119 credits are required for an A.A.S. degree.

Students must complete each ABF and related course with a 2.0 grade point or better before advancing to subsequent quarters.

ABF 266 and 267 or ABF 288 may be substituted for ABF courses in the sixth quarter with permission of the instructor.

[1] *This related education requirement may be met by any course or combination of courses approved by the instructional dean.*

AUTOMOTIVE MACHINIST

A.A.S. Degree, Certificate: SCC

Successful completion of the two-year automotive machinist program enables graduates to enter the workforce as skilled craftsmen. They possess a thorough understanding of the internal combustion engine and the methods required to remanufacture the complete project. They have the knowledge and ability to safely and successfully operate sophisticated machinery. Students learn about materials used in today's high-tech engines with emphasis on the exacting tolerances neces-sary for successful operation of the finished engine. They are offered specialized training with intense theory and hands-on performance based objectives. All of the automotive machinist classes are competency-based to maximize the students' ability to learn the subject matter at their own pace.

The automotive machinist certificate program is offered to the person who has an automotive background and wishes to specialize as an automotive machinist. The program consists of the last three quarters of the two-year automotive machinist program. To enroll in the certificate program, the student should have industry experience. Instructor permission is required before enrolling.

FIRST YEAR

First Quarter

AUTMT	110	Principles of Engine Operation and Identification	9
AUTMT	111	Engine Disassembly Methods	4
AUTMT	112	Basic Machinery Operation	3
AUTMT	113	Shop Safety	2
CIS	105	Computer Fundamentals for Vocations I	2
		Total	**20**

Second Quarter

AGGEN	157	Arc Welding	1
AGGEN	158	Oxy-acetylene Welding	1
AUTMT	120	Machinery Setup and Maintenance	7
AUTMT	121	Machinery Setup and Maintenance Applications	8
		Total	**17**

Third Quarter

AGGEN	161	Advanced Maintenance Welding	1
APLED	123	Leadership Skills for Business and Industry[1]	3
AUTMT	130	Principles of Air Flow	8
AUTMT	131	Air Flow Applications	2
AUTMT	132	Camshaft and Cylinder Head Applications	8
		Total	**22**

SECOND YEAR

Fourth Quarter

APLED	121	Applied Written Communication [1]	4
AUTMT	210	Engine Construction	2
AUTMT	211	Engine Machining Theory I	6
AUTMT	212	Engine Machine Applications I	8
		Total	**20**

Fifth Quarter

APLED	125	Employment Preparation [1]	3
AUTMT	220	Practical Math	2
AUTMT	221	Engine Machining Theory II	6
AUTMT	222	Engine Machining Applications II	8
		Total	**19**

Sixth Quarter

AUTMT	230	Engine Assembly and Testing[2]	3
AUTMT	231	Engine Machining Theory III[2]	6
AUTMT	232	Engine Machining Applications III[2]	7
ISFTY	111	Industrial First Aid[3]	2
		Total	**16-18**

116 credits are required for an A.A.S. degree and 55 credits are required for a certificate.

A 2.0 or better must be maintained in all automotive coursework before advancing to the subsequent quarter. Students not meeting this minimum requirement must repeat the course(s) before progressing.

[1] *This related education requirement may be met by any alternate course or combination of courses approved by the instructional dean.*

[2] *AUTMT 266 (2 credits) and 267 (14 credits) or 288 (16 credits) may be substituted for AUTMT courses in fifth or sixth quarter with instructor permission.*

[3] *Industrial First Aid is not required for the certificate.*

AUTOMOTIVE TECHNOLOGY
A.A.S. Degree, Certificate: SCC

The automotive technology program prepares students for employment in many areas of the automotive field including dealerships, independent garages, fleet shops, service stations and specialty shops which cover areas such as tune-ups and brakes. Students may enter the program in any of the first five quarters. The one-year certificate requires completion of any three quarters of the automotive technology program and the four related classes identified in footnote 1. This flexible schedule also enables students to receive short-term certificates while pursuing their degree.

Students interested in receiving special training in Toyota T-TEN (Technical Education Network) may substitute specialized courses specifically catering to Toyota T-TEN (AUTO 235, 236, 240, 241, 252 and 262).

FIRST YEAR
First Quarter
APLED 121 Applied Written Communication[1] 4
AUTO 111 Theory of Brakes. 3
AUTO 112 Theory and Application of Brake Repair 4
AUTO 131 Principles of Suspension Systems 4
AUTO 132 Service and Repair of Suspension Systems 5
Total 20

Second Quarter
APLED 112 Applied Mathematics[1] 4
AUTO 211 Theory of Engines[2] 8
AUTO 212 Theory and Application of Engine Repair 8
Total 20

Third Quarter
AGGEN 157 Arc Welding 1
AUTO 115 Theory of Electronics and Accessories[2] 4
AUTO 116 Diagnosis of Electronics and Accessories[2] 5
AUTO 215 Advanced Theory of Electronics and Accessories[2] 3
AUTO 216 Advanced Diagnosis of Electronics and Accessories[2] . . 4
ISFTY 111 Industrial First Aid[1] 2
Total 19

SECOND YEAR
Fourth Quarter
AGGEN 158 Oxy-acetylene Welding 1
AUTO 117 Theory of Engine Performance[2] 5
AUTO 118 Diagnosis of Engine Performance[2] 6
AUTO 119 Theory of Air Conditioning 2
AUTO 120 Air Conditioning Applications 3
CIS 105 Computer Fundamentals for Vocations I[1] 2
Total 19

Fifth Quarter
APLED 125 Employment Preparation[1] 3
AUTO 121 Principles of Engine Performance, Air Conditioning, and Electrical 4
AUTO 122 Engine Performance, Service, and Repair 5
AUTO 221 Advanced Principles of Engine Performance, Air Conditioning, and Electrical 3
AUTO 222 Advanced Engine Performance, Service, and Repair . . 4
Total 19

Sixth Quarter
AUTO 113 Theory of Transmissions/Transaxles[3] 3
AUTO 114 Diagnosis of Transmissions/Transaxles[3] 4
AUTO 129 Principles of Automatic Transmissions[3] 4
AUTO 130 Service and Repair of Automatic Transmissions[3] 5
MMGT 205 Small Business Planning[1] 5
Total 21

Students must complete each AUTO course with a 2.0 grade or better before advancing to subsequent quarters.

118 credits are required for an A.A.S. degree and 58-60 credits are required from any three quarters for a certificate.

[1] This related education requirement may be met with any course or combination of courses approved by the instructional dean. Required related courses for the one-year certificate are APLED 112, 121, 125 and ISFTY 111.

[2] These courses must be taken before AUTO 121 and 122.

[3] AUTO 266 and 267 or 288 (no seminar) may be substituted. A maximum of 18 credits of cooperative education is allowed.

Brakes And Suspension Certificate
This short-term certificate provides students with both theory and practical lab applications in automotive brake, suspension and hydraulic systems. Students gain experience in the diagnosis and repair of the following systems and components: master cylinder and hydraulic systems, drum and disc brakes, parking brakes, machining of brake drums and rotors, power brake units, and anti-lock brake systems.
AUTO 111 Theory of Brakes. 3
AUTO 112 Theory and Application of Brake Repair 4
AUTO 131 Principles of Suspension Systems 4
AUTO 132 Service and Repair of Suspension Systems 5
Total 16

16 credits are required for a certificate.

Engine Repair Certificate
This short-term engine repair certificate program provides students with theory and operation fundamentals of engine diagnosis. Students gain practical shop experience in engine repair, inspection of cylinder heads, valve trains, engine blocks, and lubrication and cooling systems.
AUTO 211 Theory of Engines 8
AUTO 212 Theory and Application of Engine Repair 8
Total 16

16 credits are required for a certificate.

Electronics/Electrical Certificate
This short-term certificate program introduces students to basic electrical concepts including Ohm's Law, magnetism, analog and digital meters, and test equipment. Students gain practical shop experience in the testing of such equipment as test lamps, voltmeters and ammeters. Hookup and testing of electronics and electrical components and circuits also are included.
AUTO 115 Theory of Electronics and Accessories 4
AUTO 116 Diagnosis of Electronics and Accessories. 5
AUTO 215 Advanced Theory of Electronics and Accessories 3
AUTO 216 Advanced Diagnosis of Electronics and Accessories. . . 4
Total 16

16 credits are required for a certificate.

Engine Performance/ Air Conditioning Certificate[1]
This two-quarter certificate program emphasizes both engine performance and air conditioning systems and components. Content areas include ignition systems, fuel and exhaust/emissions systems, theory of carburetion and ignition systems. Students are introduced to heating and air conditioning systems and gain practical shop experience in their diagnosis and repair procedures.
AUTO 117 Theory of Engine Performance 5
AUTO 118 Diagnosis of Engine Performance. 6
AUTO 119 Theory of Air Conditioning. 2
AUTO 120 Air Conditioning Applications 3
Total 16
AUTO 121 Principles of Engine Performance, Air Conditioning, and Electrical 4
AUTO 122 Engine Performance, Service, and Repair 5
AUTO 221 Advanced Principles of Engine Performance, Air Conditioning, and Electrical 3
AUTO 222 Advanced Engine Performance, Service, and Repair . . 4
Total 16

32 credits are required for a certificate.

[1] An Electronics/Electrical certificate must be earned before taking these courses.

Automotive Transmissions/ Transaxles Certificate

This short-term certificate program introduces students to the theory and operation of both manual and automatic transmissions/transaxles, differential, drive line, and constant velocity joints. Students learn the principles of steering and suspension systems including MacPherson struts and four-wheel alignment, late model transmissions, transaxles and sub assemblies. Practical applications include the diagnosis and repair of all types of transmissions/transaxles components.

AUTO	113	Theory of Transmissions/Transaxles	3
AUTO	114	Diagnosis of Transmissions/Transaxles.	4
AUTO	129	Principles of Automatic Transmissions.	4
AUTO	130	Service and Repair of Automatic Transmissions	5
		Total	**16**

16 credits are required for a certificate.

Toyota T-TEN Option

FIRST YEAR

First Quarter

AUTO	102	Introduction to Tools and Measurements	3
AUTO	103	Tire Service and Repair	2
AUTO	104	Lube Service	2
AUTO	105	Toyota Information Systems	3
AUTO	106	Pre-Delivery Inspections	1
AUTO	107	Electrical Circuitry Theory	5
ISFTY	111	Industrial First Aid[1]	2
		Total	**18**

Second Quarter

APLED	112	Applied Mathematics[1]	5
AUTO	123	Advanced Diagnosis of Electronics	6
AUTO	124	Electrical Wiring Diagrams	2
AUTO	125	Engine Theory	4
AUTO	126	Engine Repair Applications	4
		Total	**21**

Third Quarter

AGGEN	158	Oxy-acetylene Welding	1
AUTO	204	Introduction to ABS and Traction Control	5
AUTO	225	Heating and Air Conditioning	5
AUTO	236	Electrical and Electrical Circuit - Toyota T-TEN	5
CIS	105	Computer Fundamentals for Vocations I[1]	5
		Total	**21**

SECOND YEAR

Fourth Quarter

APLED	121	Applied Written Communication[1]	4
AUTO	201	Theory of Brakes	5
AUTO	202	Brake Applications	3
AUTO	203	Principles of Suspension Systems	3
AUTO	205	Introduction to ABS and Traction	2
AUTO	209	Heating and Air Conditioning	3
		Total	**20**

Fifth Quarter

APLED	125	Employment Preparation[1]	3
AUTO	206	Theory of Engine Performance	3
AUTO	207	Engine Performance Diagnostics	4
AUTO	208	Service and Repair of Engine Performance	5
AUTO	219	Hybrid Service and Repair	3
		Total	**18**

Sixth Quarter

AUTO	217	Steering Systems and Alignment	3
AUTO	218	Manual Transmissions	4
AUTO	223	Automatic Transmissions.	2
AUTO	224	Automatic Transmission Repair	2
AUTO	226	Advanced Emission Service and Repair	4
		Total	**15**

113 credits are required for an A.A.S. degree.

[1] *This related education requirement may be met with any course or combination of courses approved by the instructional dean.*

AVIATION MAINTENANCE TECHNOLOGY

A.A.S. Degree, Certificate: SCC

Approved courses in both airframe and powerplant mechanics are offered to meet the Federal Aviation Administration requirements. General aircraft courses offered the first two quarters are prerequisites to both the airframe and powerplant phase of the program. Students receive a well-rounded education in general aircraft mechanics the first two quarters of the program. Third- and fourth-quarter course offerings include both lecture and lab courses in airframe repair, and fifth- and sixth-quarter offerings include lecture and lab courses in powerplant repair. Courses to satisfy the requirements for an A.A.S. degree will be by arrangement.

Graduates of the program are eligible to take the FAA examination for both the airframe and powerplant licenses. A minimum of 1,900 attendance hours is required to take these exams.

FIRST YEAR

First Quarter

ARCFT	115	Introduction to General Aircraft Maintenance	5
ARCFT	116	Introduction to General Aircraft Maintenance Shop	4
ARCFT	117	General Aircraft Maintenance	5
ARCFT	118	General Aircraft Maintenance Shop	4
MATH	100	Vocational Technical Mathematics[1]	3-4
		Total	**21-22**

Second Quarter

ARCFT	119	Advanced General Aircraft Maintenance	5
ARCFT	120	Advanced General Aircraft Maintenance Shop	4
ARCFT	135	Basic Airframe Maintenance	5
ARCFT	136	Basic Airframe Maintenance Shop	5
		Related Education Requirement[2]	3-4
		Total	**22-23**

Third Quarter

ARCFT	137	Airframe Structures	5
ARCFT	138	Airframe Structures Shop	5
ARCFT	139	Airframe Systems	5
ARCFT	140	Airframe Systems Shop	5
		Related Education Requirement[2]	3-4
		Total	**23-24**

SECOND YEAR

Fourth Quarter

ARCFT	235	Advanced Airframe Systems	5
ARCFT	236	Advanced Airframe Systems Shop	5
ARCFT	237	Integrated Airframe Powerplant Maintenance	5
ARCFT	238	Integrated Airframe Powerplant Maintenance Shop	5
		Related Education Requirement[2]	3
		Total	**23**

Fifth Quarter

ARCFT	245	Aircraft Engines I	5
ARCFT	246	Aircraft Engines Shop I	5
ARCFT	247	Aircraft Engines II	5
ARCFT	248	Aircraft Engines Shop II	5
		Total	**20**

Sixth Quarter

ARCFT	255	Powerplant Systems and Components I	5
ARCFT	256	Powerplant Systems and Components I Shop	5
ARCFT	257	Powerplant Systems and Components II.	5
ARCFT	258	Powerplant Systems and Components II Shop	5
		Total	**20**

Seventh Quarter[3]

ARCFT	275	Theory and Review-Airframe or Powerplant	1-10
ARCFT	276	Airframe or Powerplant Shop	1-10
		Total	**2-20**

129-149 credits are required for an A.A.S. degree.[4]

[1] *This course may be substituted with any course from the department preapproved substitution list or any related course or combination of courses approved by the instructional dean.*

[2] *This course may be chosen from a preapproved departmental elective list or*

any related course or combination of courses approved by the instructional dean.

[3] *Available for students who have not accumulated 1900 hours or satisfied other FAA requirements.*

[4] *A subtotal of 12 credits (a minimum of 3 in each category) in the related education areas of computation, written communication, and human relations/leadership is required for the A.A.S. degree.*

General Aircraft Maintenance Certificate

This two-quarter certificate provides students with both theory and practical lab applications in aviation physics and aerodynamics, aircraft weight and balance, aircraft ground handling, basic aircraft electrical circuits, aircraft inspection techniques, aircraft materials and construction, and Federal Aviation Administration regulations and maintenance entries.

Completion of this certificate is required before airframe and/or powerplant certificate programs are taken.

ARCFT	115	Introduction to General Aircraft Maintenance	5
ARCFT	116	Introduction to General Aircraft Maintenance Shop	4
ARCFT	117	General Aircraft Maintenance	5
ARCFT	118	General Aircraft Maintenance Shop	4
		Total	**18**
ARCFT	119	Advanced General Aircraft Maintenance	5
ARCFT	120	Advanced General Aircraft Maintenance Shop	4
ARCFT	135	Basic Airframe Maintenance	5
ARCFT	136	Basic Airframe Maintenance Shop	5
		Total	**19**
MATH	100	Vocational Technical Mathematics (REQUIRED BY FAA)	3

40 credits are required for a certificate.

FAA requires 400 hours of attendance.

Airframe Maintenance Certificate

This two-quarter certificate provides students with both theory and practical lab application on advanced aircraft construction, rigging and repair, aircraft operation systems, aircraft warning systems, and advanced aircraft electrical systems. This certificate in conjunction with the general aircraft maintenance certificate would allow a student to be eligible to apply for a Federal Aviation Administration maintenance airframe license.

ARCFT	137	Airframe Structures	5
ARCFT	138	Airframe Structures Shop	5
ARCFT	139	Airframe Systems	5
ARCFT	140	Airframe Systems Shop	5
		Total	**20**
ARCFT	235	Advanced Airframe Systems	5
ARCFT	236	Advanced Airframe Systems Shop	5
ARCFT	237	Integrated Airframe Powerplant Maintenance	5
ARCFT	238	Integrated Airframe Powerplant Maintenance Shop	5
		Total	**20**

40 credits are required for a certificate.

FAA requires 750 hours of attendance.

Powerplant Maintenance Certificate

This two-quarter certificate provides students with both theory and practical lab application in powerplant theory and construction both for reciprocating and turbine engines, and theory and repair of powerplant accessories. This certificate in conjunction with the general aircraft maintenance certificate allows students to be eligible to apply for a Federal Aviation Administration maintenance powerplant license.

ARCFT	245	Aircraft Engines I	5
ARCFT	246	Aircraft Engines Shop I	5
ARCFT	247	Aircraft Engines II	5
ARCFT	248	Aircraft Engines Shop II	5
		Total	**20**
ARCFT	255	Powerplant Systems and Components I	5
ARCFT	256	Powerplant Systems and Components I Shop	5
ARCFT	257	Powerplant Systems and Components II	5
ARCFT	258	Powerplant Systems and Components II Shop	5
		Total	**20**

40 credits are required for a certificate.
FAA requires 750 hours of attendance.

BAKING: PROFESSIONAL PASTRIES AND SPECIALTY CAKES

Certificate: SCC

This program prepares students for employment in independent, specialty bakeries and professional cake decorating environments. The certificate provides practical and theoretical training in personal hygiene in the baking industry, baking machinery usage, and production training in the baking of artisan breads and pastries. Students learn decorating, including proper piping procedures, tube usage, flower creation and decoration, color mixing and design principles.

A 2.0 grade or higher must be maintained in all APLED, BAK and HM courses for the certificate.

First Quarter

BAK	101	Introduction to Baking and Pastries	1
BAK	110	Artisan Breads	5
BAK	111	Pastries	7
HM	112	Hospitality Mathematics[1]	3
		Total	**16**

Second Quarter

BAK	120	Special Occasion Cakes	2
BAK	121	Tortes and Gateau	2.5
BAK	130	Sculptured Cakes	2.5
BAK	131	Rolled Fondant	2.5
BAK	248	Wedding Cakes	2.5
HM	115	Food Sanitation	3
		Total	**15**

Third Quarter

APLED	121	Applied Written Communication[1]	4
APLED	123	Leadership Skills for Business and Industry[1]	3
BAK	266	Cooperative Education Seminar AND	1
BAK	267	Cooperative Education Work Experience	6
		Total	**14**

45 credits are required for the certificate.

[1] *This course may be substituted with any course or combination of courses approved by the instructional dean.*

BIOMEDICAL EQUIPMENT TECHNICIAN

A.A.S. Degree: SCC

This program is designed to prepare students for employment in the specialized field of biomedical electronics in a hospital or in the medical electronics industry.

The curriculum has been planned to give comprehensive training in circuit analysis, laboratory techniques and the use of modern test equipment. A balanced study of peripheral subjects that make the biomedical equipment technician unique also is included. These subjects include fundamentals of physics, chemistry, physiology, medical terminology, hospital ethics and hospital safety. The curriculum provides special lectures and laboratories in repair, and preventive maintenance of medical electronic equipment.

Graduates are prepared for employment as entry-level biomedical equipment technicians. To qualify for graduation, the student must have successfully completed five quarters of basic electronics including the additional required courses (i.e., Chemistry and Physics) and the six and seventh quarter biomedical sequence. Entrance to each quarter of basics is contingent upon satisfactory completion of the previous quarter. Students may enroll fall and winter quarters only. The clinical practicum is available during summer quarter only.

The goal of the program is to provide the health care field with biomedical equipment technicians who have a thorough understanding of electronic fundamentals; a practical ability to design, construct and troubleshoot electronic circuits; and knowledge about the theory of operation, physiological principles, and the safe and practical applications of biomedical equipment.

FIRST YEAR

First Quarter

ELECT	110	Computer Fundamentals for Electronics	2
ELECT	111	Fundamentals of DC/AC Circuits	7
ELECT	112	DC/AC Circuit Lab	5
ELECT	113	DC/AC Circuit Math	5
		Total	**19**

Second Quarter

BIOEQ	199	Medical Terminology for Biomedical Equipment Technology[1]	2
ELECT	121	Advanced DC/AC Circuits	9
ELECT	122	Advanced DC/AC Circuits Lab	5
ELECT	123	Advanced DC/AC Circuit Math	5
		Total	**21**

Third Quarter

ELECT	136	Solid State Devices and Circuits	5
ELECT	137	Solid State Devices and Circuits/Lab	4
ELECT	138	Linear Devices and Circuits	5
ELECT	139	Linear Devices and Circuits Lab	4
PHYS	100	Introductory Physics[2]	5
		Total	**23**

SECOND YEAR

Fourth Quarter

CHEM	161	General Chemistry for Health Sciences[2]	5
ELECT	211	Digital Concepts	5
ELECT	212	Digital Concepts Lab	4
ELECT	213	Basic Computer Systems	5
ELECT	214	Basic Computer Systems Lab	4
		Total	**23**

Fifth Quarter

APLED	125	Employment Preparation[3]	3
ELECT	221	Communication Fundamentals	5
ELECT	222	Communication Fundamentals Lab	4
ELECT	223	Advanced Computer Systems	5
ELECT	224	Advanced Computer Systems Lab	4
		Total	**21**

Sixth Quarter

APLED	121	Applied Written Communication[2, 3]	4
BIOEQ	242	Physiology for Biomedical Equipment Technology	3
BIOEQ	251	Biomedical Instrumentation Patient Monitoring and Clinical	10
BIOEQ	252	Biomedical Instrumentation Laboratory	6
		Total	**23**

Seventh Quarter

BIOEQ	271	Biomedical Equipment Technology Clinical Rotation	10
BIOEQ	272	Biomedical Seminar	4
		Total	**14**

144 credits are required for the A.A.S. degree.

[1] *This course is offered winter quarter only.*

[2] *It is recommended that students starting fall quarter should take APLED 121, CHEM 161 and PHYS 100 during summer quarter to lighten their credit load for the third and fourth quarters.*

[3] *These courses may be substituted by any course or combination of courses approved by the instructional dean.*

BIOTECHNOLOGY

A.A.S. Degree: SCC

Biotechnology is a fascinating and rapidly changing field. Many of the techniques used in the industry today were known only to a few scientists in the world less than a decade ago. Scientists working in research and industry use biotechnology techniques to uncover the molecular basis for human diseases and for the production of new drugs and treatments, the enhancement of agricultural products, and the remediation of environmental problems. The SCC biotechnology program prepares students for work in commercial or public research laboratories that rely on this cutting-edge technology. The curriculum provides a basic foundation in science disciplines including chemistry, biology, microbiology, genetics and immunology, as well as coursework in communications, mathematics and computer science. Students will build a working knowledge of molecular biology, recombinant DNA and tissue cultures through a broad-based program of lectures, hands-on laboratory experiences and work-based learning opportunities.

Job opportunities in biotechnology are increasing rapidly as new technologies are increasing, especially in the areas of medicine and agriculture. The completion of the human genome sequence promises to revolutionize the relationship between biotechnology and medicine, and similar results are expected in agriculture from the sequencing of genomes of major crop species. The biotechnology industry has more than tripled in size between 1992 and 2000. The Spokane region is home to an emerging biotechnology cluster with more than 50 biotech and biomedical firms (Spokane Area Economic Development Council) and is adjacent to a national biotechnology center in the Puget Sound region.

Entry-level salaries range from $20,000 to $25,000 depending on education and experience. With experience, lab technicians may be promoted to supervisory positions. Positions available to graduates include laboratory assistant, laboratory specialist or research technologists. Potential employers include universities, biotechnology companies, pharmaceutical labs, fisheries and natural resource management organizations.

FIRST YEAR

First Quarter

BIOL	101	General Biology	5
BIOL	120	Scientific Investigation	5
ENG	101	English Composition	5
		Total	**15**

Second Quarter

BIOTC	120	Cell Culture Techniques	5
BIOTC	122	Good Manufacturing Practices	1
BOT	111	Botany: Plant Structure and Function[1]	0-5
SPCH	220	Intercultural Communication	5
		Total	**11–16**

Third Quarter

BIOL	233	Genetics	5
BIOTC	129	Introduction to Protein Chemistry	2
BIOTC	201	Scientific Communication	3
MATH	111	Pre-Calculus I	5
		Total	**15**

Fourth Quarter

BIOTC	240	Biotechnology Internship[2]	1-5
		Total	**1-5**

SECOND YEAR

Fifth Quarter

BIOTC	251	Recombinant DNA	5
CHEM	141	Advanced General Chemistry	5
PHYS	101	General Physics	5
		Total	**15**

Sixth Quarter

BIOTC	220	Instrumental Analysis	1
BIOTC	261	Fermentation	5
CHEM	142	Advanced General Chemistry	5
MBIOL	231	General Microbiology	5
		Total	**16**

Seventh Quarter

BIOTC	237	Introduction to Immunology	5
BIOTC	289	Biotechnology Project Internship[2]	1-3
CHEM	143	Advanced General Chemistry	5
ZOOL	122	Vertebrate Zoology[1]	0-5
		Total	**11–18**

90-100 credits are required for an A.A.S. degree.

IMPORTANT: Courses with the BIOTC prefix are NOT generally transferable to four-year institutions. Articulation agreements are currently being negotiated with universities in this area.

[1] *Students may choose between BOT 111 or ZOOL 122 but are encouraged to take both.*

[2] *Permission of the instructor is required for these courses.*

BRIEF COMPUTING-SOFTWARE APPLICATIONS

CERTIFICATE: SFCC

The computing-software applications certificate program is designed to meet the growing need for computer skills. Students and members of the business community need computer training for current and future employment. The program is designed to be "generic," which supplements a two-year degree program or as a stand-alone certificate for those already in the working world. The student must have career goals or a profession in which to apply the computer skills gained through the certificate program.

The primary goal of the certificate program is to teach students to use the computer for daily business operations. Special attention is given to "hands-on" experience using popular software applications.

The certificate indicates to the employer that the certificate holder has the skills to effectively utilize a computer.

First Quarter

CAPPS	104	Windows	1
CAPPS	110	Word	1
CAPPS	112	Excel	1
CAPPS	114	Access	1
CAPPS	116	PowerPoint	1
IS	142	Hardware Fundamentals	3
IS	143	Operating System Fundamentals	2
IS	144	Programming Fundamentals	3
IS	160	Internet Fundamentals	1
		Total	**14**

14 credits are required for a certificate.

Three elective credits required from any CAPPS courses. Credits used for required core curriculum cannot be used as electives.

BUSINESS, GENERAL

A.A.S. Degree: SCC, SFCC

The objective of this program is to permit the student maximum flexibility in designing a two-year program of study in business. The student may specialize in a particular area of business such as distribution, sales, or accounting; or select courses that provide a general exposure to several areas of business.

The general business curriculum serves the student who is uncertain about transferring to a four-year institution or who wants a curriculum that maximizes transferability and at the same time permits emphasis on business courses to a greater extent than is possible when taking the general two-year transfer program.

Such a curriculum does not permit a student to complete all the courses normally required by a four-year institution in the freshman-sophomore years; however, it is possible for the student to undertake a curriculum where many of these requirements are met and where all other completed courses taken could be accepted for elective credit by the four-year institution. All students graduating from this program must have a minimum grade of 2.0 on each of the Management, Accounting, Economic, and General Business required courses. Students must also have a 2.0 cumulative minimum grade point average on all required courses in the program at SCC only.

A.A.S. Degree-SCC Program Outline
Basic Business Core

ACCT	151	College Accounting I or equivalent[1]	5
CIS	110	Introduction to Computer Applications[2]	5
ECON	100	Fundamentals of Economics or higher	5
ENG	101	English Composition	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication OR	
SPCH	201	Speech for Business and Professions	3-5

ENG	201	Advanced English Composition OR	
ENG	205	Technical Writing OR	
BT	272	Business Correspondence[3]	5
GBUS	101	Introduction to Business	5
GBUS	104	Business Mathematics[4]	5
GBUS	280	Human Relations in Business	5
MMGT	100	Supervised Volunteer Experience	1
MMGT	101	Principles of Management	5
		Total	**49-51**

General Business Option Requirements

MMGT	211	Marketing	5

RECOMMENDED BUSINESS ELECTIVES:

Business Electives (any approved business courses)[5] 36

90-92 credits are required for an A.A.S. degree.

General elective may be chosen for five credits. Other business courses may be selected with approval of the department advisor.

[1] *ACCT 101 may be taken in place of ACCT 151.*

[2] *Keyboarding skills are required.*

[3] *BT 109 is a prerequisite.*

[4] *GBUS 103 or proficiency test is required.*

[5] *GBUS 120 is strongly recommended.*

A.A.S. Degree-SFCC Program Outline
FIRST YEAR

First Quarter

BT	100	Keyboarding for Computers[1]	1
BT	107	Business Communications[2]	3
GBUS	101	Introduction to Business	5
		Business Elective[3]	3
		General Elective	5
		Total	**17**

Second Quarter

BT	108	Business Communications[2]	3
GBUS	103	Basic Business Math and Electronic Calculators	5
GBUS	108	eBusiness	2
		General Elective	5
		Total	**15**

Third Quarter

BT	272	Business Correspondence	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
		Computer Software Elective[4]	1
		Business Elective[3]	2
		Business OR Non-business Elective	2
		Total	**15**

SECOND YEAR

Fourth Quarter

ACCT	101	Principles of Accounting[5]	5
ECON	201	Introduction to Macroeconomics	5
		Business Electives[3]	5
		Total	**15**

Fifth Quarter

ACCT	121	Payroll Procedures	3
ACCT	122	Business Tax Accounting	1
GBUS	205	Business Law	5
		Business Electives[3]	5
		Total	**14**

Sixth Quarter

GBUS	280	Human Relations in Business	5
		Business Electives[3]	6
		General Elective	3
		Total	**14**

90 credits are required for an A.A.S. degree.

[1] *BT 101 may be substituted.*

[2] *ENG 101 may be substituted for BT 107 and 108 depending on the student's educational objectives.*

[3] *All general business students must take a minimum of 19 credits of business electives.*

[4] *Computer software electives may be chosen from the following:*
    CAPPS   102   Introduction to Office *1*
    CAPPS   110   Word *1*
    CAPPS   112   Excel. *1*
    CAPPS   114   Access *1*
    CAPPS   116   PowerPoint. *1*

[5] *ACCT 103 and 104 may be taken in place of ACCT 101.*

BUSINESS AND SOFTWARE APPLICATIONS

Certificate: SFCC

The Business and Software Applications certificate-a three-quarter program of study-helps students develop math and communication skills required in a business environment. In addition, students learn computer applications and human relations skills. This certificate is intended to provide students with the essential skills and knowledge required for entry-level positions in business.

First Quarter

BT	100	Keyboarding for Computers AND	
CAPPS	110	Word OR	
BT	101	Keyboarding	5
BT	107	Business Communications	3
GBUS	102	Math Skills for Business	3
IS	120	Business Computer Use OR	
IS	160	Internet Fundamentals	1-3
		Total	**12-14**

Second Quarter

ACCT	103	Fundamental Bookkeeping Procedures	3
BT	108	Business Communications	3
CAPPS	112	Excel	3
CAPPS	116	PowerPoint	2
GBUS	101	Introduction to Business	5
		Total	**16**

Third Quarter

BT	272	Business Correspondence	5
CAPPS	114	Access	2
GBUS	108	eBusiness	2
GBUS	280	Human Relations in Business OR	
MMGT	223	Customer Service	3-5
		Total	**12-14**

40-44 credits are required for a certificate.

BUSINESS OCCUPATIONS

Certificate: SCC, SFCC

The business occupations certificate is designed to provide a balanced survey of business knowledge and skills that are core to the general business associate in applied science degree program and most other business A.A.S. degree programs. All students graduating from this program must have a minimum grade of 2.0 on each of the Accounting, Economics and General Business required courses at SCC only. Students must also have a 2.0 cumulative minimum grade point average on all required courses in the program at SCC only.

ACCT	151	College Accounting I or higher[1]	5
BT	101	Keyboarding[2]	0-5
CIS	110	Introduction to Computer Applications OR	
CS	101	Computer Literacy OR	
IS	120	Business Computer Use	3-5
GBUS	101	Introduction to Business	5
GBUS	102	Math Skills for Business OR	
GBUS	103	Basic Business Math and Electronic Calculators	3-5
GBUS	280	Human Relations in Business OR	
MMGT	101	Principles of Management	5
		Business Electives.	16-17
		Written Communications - List A	5-6
		Speech Communications - List B[3]	3-5
		Total	**45-58**

LIST A:

BT	107	Business Communications	3
BT	108	Business Communications	3
BT	109	Business Communications	5
BT	272	Business Correspondence	5
ENG	101	English Composition	5
ENG	201	Advanced English Composition	5

LIST B:

ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
SPCH	102	Interpersonal Communication	5
SPCH	201	Speech for Business and Professions	3

45-58 credits are required for a certificate.

[1] *ACCT 101 may be taken in place of ACCT 151.*

[2] *Students with keyboarding experience may waive this requirement by passing a department proficiency test at SCC or by obtaining a waiver from the office technology department chair at SFCC.*

[3] *Additional courses in written communications may be substituted for the speech communication list at SFCC only.*

CARPENTRY AND CABINETRY

A.A.S. Degree, Certificate: SCC

Carpentry is a rewarding career ideally suited to the person who has an interest in and aptitude for working with tools and materials. The trade requires the development of manual skills: skills that involve both thinking and doing. Carpentry also requires a thorough knowledge of materials and methods used in construction work.

The carpenter belongs to the largest group of building trade workers. Job opportunities encompass everything from new residential or commercial construction to remodeling and alteration, maintenance, and building repair work.

FIRST YEAR

First Quarter

APLED	121	Applied Written Communication[1]	4
CARP	113	Carpentry Math	5
CARP	114	Transit Layout and Design	4
CARP	115	Basic Construction Systems	7
		Total	**20**

Second Quarter

CARP	123	Cabinetry Math	3
CARP	124	Cabinet Layout and Design	5
CARP	125	Cabinet Construction	5
CARP	126	Cabinet Finishing	3
ISFTY	111	Industrial First Aid	2
		Total	**18**

Third Quarter

CARP	133	Introduction to Estimating	3
CARP	134	Introduction to Trim and Exterior Finish	3
CARP	135	Practical Construction Applications	8
CARP	136	Residential Blueprint Reading	2
		Total	**16**

SECOND YEAR

Fourth Quarter

APLED	123	Leadership Skills for Business and Industry[1]	3
CARP	243	Plan Reading and Material Estimation	7
CARP	244	Practical Framing Applications	9
MET	103	Introduction to Computers for Technology	3
		Total	**22**

Fifth Quarter

ARCHT	125	Residential Building Codes	2
CARP	251	Introduction to Construction Trades	2
CARP	253	Exterior Estimating	7
CARP	254	Exterior Application Methods	9
		Total	**20**

Sixth Quarter[2]

CARP	263	Interior Estimating	7

CARP   264   Interior Application Methods 9
         Total **16**

Seventh Quarter

CARP   223   Advanced Cabinetry Math 3
CARP   224   Advanced Cabinet Layout and Design 5
CARP   225   Advanced Cabinet Construction. 5
CARP   226   Advanced Cabinet Finishing. 3
         Total **16**

Certificate

First Quarter

APLED   121   Applied Written Communication[1] 4
CARP   113   Carpentry Math 5
CARP   114   Transit Layout and Design 4
CARP   115   Basic Construction Systems 7
         Total **20**

Second Quarter

APLED   123   Leadership Skills for Business and Industry[4]. 3
CARP   123   Cabinetry Math 3
CARP   124   Cabinet Layout and Design 5
CARP   125   Cabinet Construction 5
CARP   126   Cabinet Finishing. 3
ISFTY   111   Industrial First Aid 2
         Total **21**

Third Quarter

CARP   133   Introduction to Estimating 3
CARP   134   Introduction to Trim and Exterior Finish 3
CARP   135   Practical Construction Applications 8
CARP   136   Residential Blueprint Reading 2
         Total **16**

Fourth Quarter [3]

CARP   223   Advanced Cabinetry Math 3
CARP   224   Advanced Cabinet Layout and Design 5
CARP   225   Advanced Cabinet Construction. 5
CARP   226   Advanced Cabinet Finishing. 3
         Total **16**

112-128 credits are required for an A.A.S. degree and 57-73 credits are required for a certificate.

[1] *This related education requirement may be met by any course or combination of courses approved by the instructional dean.*

[2] *CARP 266 (2 credits) and (14 credits), or 288 (no seminar) may be substituted for CARP 263 and 264 with permission of the instructor.*

[3] *These quarters are optional for both the certificate and the A.A.S. degree.*

[4] *Required only for those students completing the certificate program.*

Basic Carpentry Certificate

This program offers a one-quarter certificate in basic cabinetry. Students are introduced to fundamental terminology and basic math needed in the design, layout, and construction of residential cabinetry. Other topics covered in basic cabinetry are interior cabinet finishes, including stain application and spraying water-based lacquers using a HVLP system. Emphasis is placed on the safe and proper use of both stationary and portable power equipment.

Students may enter the program winter quarter only. Enrollment is limited to space available; preference is given to those students working toward their A.A.S. degree or one-year certificates.

CARP   123   Cabinetry Math 3
CARP   124   Cabinet Layout and Design 5
CARP   125   Cabinet Construction 5
CARP   126   Cabinet Finishing. 3
         Total **16**

112 credits are required for an A.A.S. degree and 56 credits are required for a certificate and 16 credits are required for a basic carpentry certificate.

Advanced Cabinetry Certificate

This cabinetry program is designed for students who wish to obtain advanced skills in cabinetry. The coursework provides both basic and advanced projects that require additional skills and techniques not of-

fered in the basic program. Permission of the instructor is required for admission to the program.

First Quarter

CARP   123   Cabinetry Math 3
CARP   124   Cabinet Layout and Design 5
CARP   125   Cabinet Construction 5
CARP   126   Cabinet Finishing. 3
         Total **16**

Second Quarter

CARP   223   Advanced Cabinetry Math 3
CARP   224   Advanced Cabinet Layout and Design 5
CARP   225   Advanced Cabinet Construction. 5
CARP   226   Advanced Cabinet Finishing. 3
         Total **16**

32 credits are required for a two-quarter certificate.

CERTIFIED PROFESSIONAL SECRETARY

Credit by Nontraditional Means: SCC, SFCC

Administrative assistants today are rewarded for their efforts to develop a broad knowledge of their own field and the business world by being awarded the title Certified Professional Secretary (CPS). This title is earned by those who meet the qualifications established by the Institute for Certification, an organization sponsored by International Association of Administrative Professionals.

Students who complete a two-year post secondary administrative assistant program in an accredited college such as SCC or SFCC may take the examination before they fulfill work experience requirements which are outlined as follows:

■ Students who complete a two-year program in an accredited school and pass the CPS examination must complete three years of verified office experience.

■ Students who complete a bachelor's or advanced degree program and pass the CPS examination must complete two years of verified administrative assistant experience.

Successful completion of the work experience requirements and the examination will permit candidates to receive the CPS certification.

Students who have successfully completed 15 to 30 quarter hours of credit at a college within Community Colleges of Spokane may be granted further credit of up to 60 quarter hours upon completing the requirements of the CPS examination.

Upon completion of the 15-credit-hour residency requirement, 30 credits may be granted. Upon completion of the 30-credit-hour residency requirement, 60 credits may apply toward the requirements for an associate in applied science or associate of arts degree at either SCC or SFCC. The designation as a certified professional secretary may permit specific credit to be given, up to 60 credits for the following courses:

ACCT   101   Principles of Accounting 5
ACCT   102   Principles of Accounting 5
BT   101   Keyboarding 5
BT   102   Document Processing 5
BT   103   Formatting 5
BT   107   Business Communications AND
BT   108   Business Communications OR
BT   109   Business Communications 5-6
BT   165   Word Processing. 5
BT   201   Information Processing 5
BT   231   Office Procedures. 5
BT   233   Directed Office Practice. 6
BT   240   Administrative Office Procedures. 8
BT   255   Business Productivity Tools 3
BT   260   Administrative Office Management. 5
BT   272   Business Correspondence 5
CAPPS   110   Word 5
CIS   101   Technical Introduction to Computer Information
                Systems OR
CIS   110   Introduction to Computer Applications. 5
CIS   255   BASIC Language for Business 5
ECON   201   Introduction to Macroeconomics 5

ECON	202	Introduction to Microeconomics	5
GBUS	101	Introduction to Business	5
GBUS	103	Basic Business Math and Electronic Calculators	5
GBUS	104	Business Mathematics	5
GBUS	205	Business Law	5
GBUS	280	Human Relations in Business	5
MMGT	231	Human Resource Management	5

The request for granting of these credits by nontraditional means should be directed to the vice president of student services at SCC or SFCC.

CHEMICAL DEPENDENCY PROFESSIONAL STUDIES

A.A.S. Degree, Certificate: SFCC

The chemical dependency professional studies program is designed to provide a two-year educational training program for people who are currently employed in a chemical dependency treatment program, or are interested in obtaining employment in the chemical dependency field.

The chemical dependency professional studies program includes classes in substance drug abuse, social services, counseling skills and other related topics that help individuals become effective with people who have drug problems. In addition, the training program includes practical fieldwork experience that provides students an opportunity to apply what has been learned.

For current certification requirements for alcohol/drug counseling in Washington state, please contact the program coordinator at Spokane Falls Community College or the Department of Health, CDP Division, Olympia, WA.

FIRST YEAR

First Quarter

HS	102	Introduction to Human Services	5
HS	136	Improving Interpersonal Communication	5
HSSUB	131	Survey of Chemical Dependency	3
IS	120	Business Computer Use	3
		Total	**16**

Second Quarter

ENG	101	English Composition	5
HSSUB	172	Chemical Dependency in the Family	3
HSSUB	179	HIV/AIDS and Chemical Dependency	2
HSSUB	277	Group Process in Chemical Dependency Treatment	5
		Total	**15**

Third Quarter

HSSUB	141	Law and Chemical Dependency Professionals	2
HSSUB	142	Ethics in Chemical Dependency	2
HSSUB	176	Chemical Dependency Counseling Techniques	5
PSYCH	101	Introduction to Psychology	5
		Total	**14**

SECOND YEAR

Fourth Quarter

GBUS	102	Math Skills for Business	3
HS	281	Practicum I	5
HSSUB	182	Cultural Diversity in Addiction Counseling	2
HSSUB	279	Case Management of Chemically Dependent Client	3
		Total	**13**

Fifth Quarter

HS	221	Treatment Theories in Human Services	5
HS	282	Practicum II	5
HSSUB	290	Current Issues in Chemical Dependency	5
		Total	**15**

Sixth Quarter

HS	283	Practicum III	5
HSSUB	275	Physiological Actions of Alcohol and Drugs	5
HSSUB	280	Advanced Case Management	3
PSYCH	210	Developmental Psychology	5
		Total	**18**

91 credits are required for an A.A.S. degree.

Certificate

HS	281	Practicum I	5
HS	282	Practicum II	5
HS	221	Treatment Theories in Human Services OR	
HSSOC	221	Treatment Theories in Human Services	5
HSSUB	141	Law and Chemical Dependency Professionals	2
HSSUB	142	Ethics in Chemical Dependency	2
HSSUB	172	Chemical Dependency in the Family	3
HSSUB	176	Chemical Dependency Counseling Techniques	5
HSSUB	179	HIV/AIDS and Chemical Dependency	2
HSSUB	182	Cultural Diversity in Addiction Counseling	2
HSSUB	275	Physiological Actions of Alcohol and Drugs	5
HSSUB	277	Group Process in Chemical Dependency Treatment	5
HSSUB	279	Case Management of Chemically Dependent Client	3
HSSUB	280	Advanced Case Management	3
HSSUB	290	Current Issues in Chemical Dependency	5
PSYCH	101	Introduction to Psychology	5
PSYCH	210	Developmental Psychology	5
		Total	**62**

62 credits are required for a certificate.

CHIROPRACTIC ASSISTANT PROGRAM

Certificate: SCC

The chiropractic assistant certificate program prepares students for positions in the chiropractic office field as receptionists and chiropractic billing clerks with the ability to communicate with and answers questions from chiropractic patients about their care and the chiropractic philosophy.

Admission Requirements:

- Keyboarding skills: 40 wpm with six or fewer errors completed at the SCC testing center or enrollment in BT 101 or 102.
- Current first aid/CPR card or successful completion of ISFTY 111 or equivalent.
- Students with ASSET scores below 30 or Compass test scores below 43 must successfully complete BT 151 during the first quarter.

First Quarter

BT	090	Basic Grammar for Business II	5
MSEC	101	Medical Terminology and Anatomy	5
MSEC	108	Medical Office Computing	5
		Total	**15**

Second Quarter

ACCT	151	College Accounting I	5
BT	231	Office Procedures	5
MSEC	102	Medical Terminology and Anatomy	5
MSEC	123	Medical Office Coding	5
		Total	**20**

Third Quarter

GBUS	103	Basic Business Math and Electronic Calculators	5
MSEC	121	Medical Office Reception	5
MSEC	124	Medical Office Insurance Billing	5
MSEC	125	Medical Office Bookkeeping	5
		Total	**20**

Fourth Quarter

BT	160	Job Preparation Techniques	3
MSEC	120	Human Relations/Communications for Medical Office Personnel	5
MSEC	284	Medical Internship Seminar	1
MSEC	289	Chiropractic Internship	3
		Total	**12**

67 credits are required for a certificate with a minimum passing grade of 2.0 in each course.

CIVIL ENGINEERING TECHNOLOGY

A.A.S. Degree: SCC

The civil engineering technology program is designed to provide a comprehensive, well balanced study in applied and related science concerning the engineering and construction industry. This course prepares students in the basic fundamentals of construction techniques, materials testing, surveying, estimating and quantity take-off, plan reading, drafting (manual and computer aided), office and business procedures, planning of construction work, and computer-aided design.

FIRST YEAR

First Quarter
CET	111	Technical Math	8
CET	112	Plan Reading	4
CET	113	Drafting	4
CIS	105	Computer Fundamentals for Vocations I[1]	3
		Total	**19**

Second Quarter
CET	121	Applied Technical Math	7
CET	122	Surveying Theory	5
CET	123	Introduction to Civil Computer Aided Design	6
GEOL	110	Environmental Geology	5
		Total	**23**

Third Quarter
CET	133	Field Surveying	8
CET	136	Statics	6
CET	161	Land Surveying	5
		Total	**19**

SECOND YEAR

Fourth Quarter
CET	242	Advanced Surveying	6
CET	243	Advanced Civil Computer Aided Design	6
CET	253	Strength of Materials	5
ENG	101	English Composition[1]	5
		Total	**22**

Fifth Quarter
APLED	125	Employment Preparation[1]	3
CET	252	Hydraulics I	6
CET	254	Structures	5
CET	257	Construction Materials I	6
		Total	**20**

Sixth Quarter
CET	230	Construction Process I	3
CET	232	Construction Process II[2]	2
CET	256	Hydraulics II	3
CET	258	Construction Materials II[2]	3
CET	261	Concrete	3
CET	264	Design Project[2]	3
		Total	**17**

120 credits are required for an A.A.S. degree.

[1] *May be substituted with any course of combination of courses approved by the instructional dean.*

[2] *May be substituted with CET 266 and 267 or 265, 288 or 291 with permission of the instructor.*

COMPUTER AIDED DESIGN AND DRAFTING

A.A.S. Degree, Certificate: SCC

The Computer Aided Design and Drafting A.A.S. degree program prepares students with the skills necessary for drafting and design using both CAD drafting and Solid Modeling techniques. The course of study prepares students to work in engineering teams for large and small manufacturing firms, consultant engineering firms, testing, and research companies to gain employment as computer aided drafters.

Students not only learn to draft using CAD and Solid Modeling techniques, but also get "hands-on" practical experience in Rapid Prototyping, engineering competitions, and by learning fabrication processes used in industry. Coursework includes a balance of basic skills in math and communications, as well as practical application of relevant computer assisted drafting skills in several engineering disciplines, including: mechanical, civil and structural engineering; architectural drafting; electrical and fluid power schematics; and fabrication /piping drafting.

FIRST YEAR

First Quarter
APLED	112	Applied Mathematics[1,2]	5
APLED	121	Applied Written Communication[1]	4
MET	101	Introduction to Engineering[3]	2
MET	105	Basic Blueprint Reading	3
MET	114	Engineering Graphics[1]	4
		Total	**18**

Second Quarter
APLED	123	Leadership Skills for Business and Industry[1]	3
MATH	100	Vocational Technical Mathematics[4]	5
MET	124	Engineering Graphics[2]	5
MET	129	Computer Aided Drafting	5
		Total	**18**

Third Quarter
MET	131	Dimensioning and Tolerancing	3
MET	132	Engineering Graphics[3]	5
MET	135	Schematics	3
		Approved Elective[5]	4-5
		Total	**15-16**

SECOND YEAR

Fourth Quarter
MET	241	CAD Solid Modeling	5
MET	248	Mechanical CAD Applications	4
MET	258	Schematic CAD Applications	4
		Approved Electives[5]	4-5
		Total	**17-18**

Fifth Quarter
APLED	125	Employment Preparation[1]	3
MET	252	Advanced CAD	5
MET	259	Architectural CAD Applications[6,7]	4
		Approved Electives[5,7]	4-5
		Total	**16-17**

Sixth Quarter
MET	268	Structural CAD Applications[6,7]	4
		Approved Electives[5,7]	11-13
		Total	**15-17**

99-104 credits are required for an A.A.S. degree.

Certificate
FIRST YEAR

First Quarter
APLED	112	Applied Mathematics[1,2]	5
APLED	121	Applied Written Communication[1]	4
MET	101	Introduction to Engineering[3]	2
MET	105	Basic Blueprint Reading	3
MET	114	Engineering Graphics 1	4
		Total	**18**

Second Quarter
APLED	123	Leadership Skills for Business and Industry[1]	3
MATH	100	Vocational Technical Mathematics[4]	5
MET	124	Engineering Graphics[2]	5
MET	129	Computer Aided Drafting	5
		Total	**18**

Third Quarter
MET	131	Dimensioning and Tolerancing	3
MET	132	Engineering Graphics 3	5
MET	135	Schematics	3
MET	259	Architectural CAD Applications[6]	4
		Total	**15**

SECOND YEAR

Fourth Quarter

APLED	125	Employment Preparation[1]	3
MET	241	CAD Solid Modeling	5
MET	248	Mechanical CAD Applications[6]	4
		Approved Electives[5, 7]	4
		Total	**16**

67 credits are required for the certificate.

APPROVED GENERAL ELECTIVES:

ARCHT	134	Electrical and Mechanical Systems	3
CET	122	Surveying Theory	5
ELMT	243	Introduction to Programmable Controllers	4
MET	127	Manufacturing Processes	3
MET	247	Shop Practices	2
MET	250	Strength of Materials	3
MET	253	Materials Science	2
MET	255	Technical Applications I	2-5
MET	260	Fabrication and Piping CAD Applications	4
MET	264	Technical Applications II	2-5
MET	269	Civil CAD Applications	4

[1] *This related education requirement may be met by any course or combination of courses approved by the department dean.*

[2] *This course may be substituted as approved by the CAD instructor or department dean with*

CET	111	*Technical Math*	8
MET	115	*Technical Mathematics AND*	5
MET	116	*Technical Mathematics Lab.*	2

[3] *This course may be substituted with CIS 105, 106 or 110.*

[4] *This course may be substituted as approved by the CAD instructor or department dean with*

CET	121	*Applied Technical Math*	7
MET	122	*Applied Technical Math Lab AND*	2
MET	123	*Applied Technical Mathematics.*	5

[5] *The approved electives include any courses listed in the footnotes above as well as the approved general electives list below.*

[6] *This course may be substituted as approved by the CAD instructor or department dean with*

MET	258	*Schematic CAD Applications*	4
MET	260	*Fabrication and Piping CAD Applications*	4
MET	268	*Structural CAD Applications*	4
MET	269	*Civil CAD Applications*	4

[7] *This course may be substituted with co-op credits MET 266 and 267 or MET 288.*

COMPUTER AND NETWORK SUPPORT

Certificate: SFCC

The Computer and Network Support certificate concentrates on the practical operation, maintenance and use of computers, computer networks and their peripherals. This intensive hands-on program prepares the certificate holder to maintain the hardware and software of computer and network systems. Computers are generally networked in LANs and on the Internet in homes, factories and offices. This program teaches students to install, configure and maintain these systems. Students also learn to assist and train computer users in the use of modern software and hardware.

This certificate is intended to prepare students for entry-level positions in computer/network support departments or as the computer/network specialist in a small to medium size office.

The following classes are prerequisites to this certificate.

- IS 142 — Hardware Fundamentals, 3 credits
- IS 143 — Operating System Fundamentals, 2 credits
- IS 144 — Programming Fundamentals, 3 credits
- IS 160 — Internet Fundamentals, 1 credit

First Quarter

CS	121	UNIX/Linux	3
IS	162	Data Communications and Networks	3
IS	240	Computer and Network Support	5

		CAPPS Elective	2
		Total	**13**

Second Quarter

GBUS	280	Human Relations in Business OR	
HS	136	Improving Interpersonal Communication	5
IS	164	Network Management	5
IS	244	Network Security I	5
		Total	**15**

Third Quarter

BT	272	Business Correspondence[1]	5
IS	228	Internet Servers	4
IS	266	Cooperative Education Seminar	1
IS	267	Cooperative Education Work Experience	2
		Total	**12**

40 credits are required for this certificate.

[1] *BT 107, 108 or ENG 101 or equivalent are prerequisites.*

COMPUTER FORENSICS/NETWORK SECURITY

Certificate: SFCC, SCC

The Computer Forensics/Network Security program is designed to provide students with capabilities in several areas of computing:

- Digital evidence recovery,
- Forensic laboratory analysis,
- Legal and technical issues regarding seizure and acquiring computer evidence, and chain of custody,
- Computer network protocols and security, intrusion detection, and network forensics.

This certificate is to provide the student with the essential skills, knowledge and experience necessary to deal with computer forensics, and computer/network security.

First Quarter

IS	132	Computer Ethics OR	
LA	240	Special Issues Seminar	3
IS	234	Computer Forensics I	5
IS	244	Network Security I OR	
CIS	214	Beginning Network Security	5
		Total	**13**

Second Quarter

IS	232	Computer Forensics/Security Seminar	2
IS	236	Computer Forensics II[1]	5
IS	245	Network Security II OR	
CIS	216	Advanced Network Security[2]	5
		Total	**12**

Third Quarter

IS	238	Computer Forensics III[3]	5
IS	247	Network Security III OR	
CIS	220	Securing the Operating System[4]	5
		Electives	2-5
		Total	**12-15**

37-40 credits are required for this certificate.

See department for approved listing of electives.

Note: IS classes are from SFCC. CIS and LA classes are from SCC.

[1] *IS 234 is a prerequisite.*

[2] *CIS 214 is a prerequisite.*

[3] *IS 236 is a prerequisite.*

[4] *CIS 216 is a prerequisite.*

COMPUTING-SOFTWARE APPLICATIONS

Certificate: SFCC

The computing-software applications certificate program is designed to meet the growing need for computer skills in daily business operations. Students and members of the business community need computer training for current and future employment. Students will develop speed and accuracy on the keyboard, develop skills in troubleshooting routine computer problems, and develop a solid foundation with current application software. A capstone course will integrate software knowledge into a simulated business project.

The primary goal of the certificate program is to teach students to use the computer for daily business operations. Special attention is given to "hands-on" experience using popular software applications.

This certificate will increase value in the workplace.

First Quarter

BT	101	Keyboarding	5
CAPPS	104	Windows	1
CAPPS	110	Word	3
IS	120	Business Computer Use	3
IS	160	Internet Fundamentals	1
		Total	**13**

Second Quarter

CAPPS	112	Excel	3
CAPPS	114	Access	3
CAPPS	116	PowerPoint	3
CAPPS	120	Outlook	1
IS	142	Hardware Fundamentals	3
IS	143	Operating System Fundamentals	2
		Total	**15**

Third Quarter

BT	160	Job Preparation Techniques	3
BT	201	Information Processing	5
BT	270	Office Computer Support OR	
IS	144	Programming Fundamentals	3
IS	210	Internet Programming I	1
		Total	**12**

40 credits are required for a certificate.

COOPERATIVE EDUCATION WORK EXPERIENCE

SCC, SFCC

Cooperative education is an organized program of study and educational work experience available throughout the student's college career.

To enroll in cooperative education the student registers for supervised cooperative work experience and the related seminar in the department appropriate to his/her academic or occupational goals. An instructor/coordinator is assigned who interviews the student and assists in locating appropriate full- or part-time paid employment as needed. In the case of those already employed, the instructor/coordinator interviews the student to determine eligibility for cooperative education. Students also may receive cooperative education credit for some types of nonpaid job experience.

Three work options are available for earning credit:

■ The student works part time and attends classes on a daily basis.

■ The student works full time and attends classes part time. This is of particular interest to evening students.

■ A student may leave the campus to work full time for a quarter, then return to resume his/her studies. This option is desirable where work experience is located outside the service area of the community college.

A student must be registered for cooperative education work experience to receive credit.

The following courses may be offered in each academic discipline at the discretion of the vice president of instruction. Specific requirements and limitations concerning courses are available from the appropriate campus instructional administrator.

Cooperative Education Seminar 266 and Cooperative Education Work Experience 267 or Cooperative Education Work Experience 288 (no seminar) can be used to meet graduation requirements for professional/technical programs with the approval of the appropriate dean.

Cooperative Education is available in many programs. For specific information call SCC (509) 533-7249 or SFCC (509) 533-3545.

266-Cooperative Education Seminar (1-2 credits)

267-Cooperative Education Work Experience (1-18 credits)

288-Cooperative Education Work Experience (no seminar) (1-18 credits)

CORRECTIONS

A.A.S. Degree: SCC

The corrections and security curriculum is made up of courses designed to prepare students for a career in the corrections arena with an emphasis on developing skills and knowledge that pertain to working in correctional facilities.

The corrections program is an outgrowth of recognition of the increasing need for trained personnel in the field. This area of criminal justice is experiencing a great deal of change and expansion. New trends in inmate management and new standards for offender care have contributed to an increased need for employment of more people who possess skills and knowledge applicable to a variety of job requirements.

Students in this field are encouraged to seek academic counseling. Only a portion of this two-year curriculum is transferable to four-year institutions. Students interested in a four-year degree should inquire at the college to which they plan to attend or transfer for specific information.

This is a recommended course of study. Students may take required courses any time they are offered. (Not all classes are offered every quarter.)

FIRST YEAR

CJ	102	Administration of Justice	5
CJ	106	Introduction to Juvenile Control	3
CJ	107	Dynamics of Deviant Behavior	5
CJ	108	Introduction to Corrections	5
CJ	132	Criminal Justice Physical Training[1]	1
CJ	150	Criminal Justice Report Writing	5
CJ	205	Introduction to Criminal Law	5
ENG	101	English Composition[2]	5
ENG	109	Speech Composition[2] AND	
SPCH	101	Introduction to Speech Communication[2]	5
SPCH	102	Interpersonal Communication[2]	5
		Math[3]	5
		P.E. Activity[4]	2
		Recommended Electives List A	5
		Total	**56**

SECOND YEAR

CJ	209	Human Relations	3
CJ	212	Professional Development	1
CJ	215	Corrections-Security-Practice and Procedure	5
CJ	216	Communication Techniques with the Incarcerated Offender	5
CJ	225	Advanced Techniques in Correctional Programming	5
CJ	227	Minority Studies	5
CJ	228	Ethics-Standards of Conduct	3
CJ	230	Institutional Programming	3
CJ	237	Criminal Justice Self-defense[5]	3
ENG	205	Technical Writing[2]	5
ISFTY	111	Industrial First Aid	2
		Recommended Electives List A	10
		Recommended Electives List B	3
		Total	**53**

109 credits are required for an A.A.S. degree.

RECOMMENDED ELECTIVES LIST A:

BIOL	101	General Biology	5
CHEM	101	General Chemistry	5
CIS	110	Introduction to Computer Applications	5
GBUS	205	Business Law	5
GBUS	217	Business Statistics	5
HLTH	101	Health and Wellness	5
HLTH	104	Stress Management	3
HSEAR	101	American Sign Language I	5
HUMAN	101	Introduction to Humanities	5
HUMAN	102	Introduction to Women's Studies	5
PHIL	101	Introduction to Philosophy	5
PHIL	210	Ethics	5
PSYCH	101	Introduction to Psychology	5
PSYCH	210	Conception through Adolescent Developmental Psychology	5
PSYCH	250	Psychology of Adjustment	5
RUSSN	101	Elementary Russian	5
SOC	101	Introduction to Sociology	5
SOC	221	Race and Ethnic Relations	5
SOC	261	Crime and Justice	5
SPAN	101	Elementary Spanish	5

RECOMMENDED ELECTIVES LIST B:

CJ	265	Service Learning Volunteer Project AND	2
GENST	155	Service Learning Project	1
CJ	266	Cooperative Education Seminar AND	1
CJ	267	Cooperative Education Work Experience OR	1-2
CJ	288	Cooperative Education Work Experience (No Seminar)	1-3
		Any Criminal Justice course	

[1] Students must have medical insurance and a doctor's release if needed; requires fitness assessment. If assessed below minimum fitness level, CJ 208 is a recommended prerequisite. PE 186 (for audit) is required to be taken concurrently with CJ 132, 133, 208, 241, 242 and 243.

[2] This course may be substituted with any course or combination of courses approved by the instructional dean.

[3] This math course may be substituted with APLED 112, GBUS 103 or any math course numbered 100 or above.

[4] CJ 133, 241, 242 or 243 are recommended and have the same requirement as CJ 132. PE 186 (for audit) is required to be concurrently.

[5] Students must pass one quarter of CJPT to enroll in this course.

COSMETOLOGY

A.A.S. Degree: SCC

Cosmetology is a diverse field that offers a variety of employment opportunities. SCC's cosmetology program provides the education and training needed to successfully compete in today's job market. Upon successful completion of the 1,600 hour program, students are prepared to take the Washington State Board Exam. After passing this exam, they will receive a license for cosmetology.

This program includes haircutting and styling, permanent waving, chemical relaxing, tinting and bleaching, and temporary superfluous hair removal; manicuring and pedicuring of natural nails; and basic skin care. In addition, safety and sanitation measures are stressed throughout the program. Students also must complete a first aid class. Students will be given review testing and simulated performance evaluations in preparation for the state licensing examination.

Students must complete the program and pass the exit exams in order to be prepared to take the Washington State examination for cosmetology.

Additional requirements for the A.A.S. degree consist of general education requirements in the areas of written communications, human relations/leadership and computation. These courses are offered as prerequisites to the program. Those students who are on a waiting list are required to take these courses to enroll in the program. Students should check with the counseling department for assistance in planning their schedules.

Prerequisites:

APLED	112	Applied Mathematics[1]	5
APLED	121	Applied Written Communication[1]	4
CIS	105	Computer Fundamentals for Vocations I OR	
CIS	110	Introduction to Computer Applications[2]	5
COS	101	Introduction to Cosmetology	2
		Total	**16**

FIRST YEAR

First Quarter

COS	111	Cosmetology, Esthetics and Manicuring Concepts I	5
COS	112	Cosmetology, Esthetics and Manicuring Applications I	12
		Total	**17**

Second Quarter

COS	121	Cosmetology, Esthetics and Manicuring Concepts II	5
COS	122	Cosmetology, Esthetics and Manicuring Applications II	11
		Total	**16**

Third Quarter

COS	131	Intermediate Cosmetology I	5
COS	132	Intermediate Cosmetology Applications I	11
		Total	**16**

SECOND YEAR

Fourth Quarter

COS	241	Intermediate Cosmetology II	5
COS	242	Intermediate Cosmetology Applications II	10
ISFTY	111	Industrial First Aid	2
		Total	**17**

Fifth Quarter

APLED	125	Employment Preparation[1, 2]	3
COS	251	Advanced Cosmetology I	5
COS	252	Advanced Cosmetology Applications I	10
		Total	**18**

Sixth Quarter

COS	261	Advanced Cosmetology II	5
COS	262	Advanced Cosmetology Applications II	10
MMGT	205	Small Business Planning[1]	5
		Total	**20**

120 credits are required for an A.A.S. degree.

[1] This related education requirement may be met by this course or combination of courses approved by the instructional dean or department chair.

[2] This course is offered on-line.

COSMETOLOGY CADET INSTRUCTOR

Certificate: SCC

This program prepares licensed cosmetologists for the cosmetology instructors' examination issued by the Washington State Board of Cosmetology. Under the supervision of a licensed cosmetology instructor, cadet instructor students receive training in instructional methods and clinical practice assisting basic students in all phases of cosmetology.

Professional courses required:

APLED	123	Leadership Skills for Business and Industry[1]	4
CIS	110	Introduction to Computer Applications	5
COS	232	Management and Laboratory Supervision	16
COS	284	Special Topics[2]	1
SPCH	102	Interpersonal Communication[3]	5
		Total	**31**

31 credits are required for a certificate.

[1] This related education requirement may be met by this course or combination of courses approved by the instructional dean.

[2] Students should consult with the instructor before enrolling in COS 284.

[3] This course may be substituted with any speech or cultural diversity course.

CREDIT AND FINANCIAL MANAGEMENT

A.A.S. Degree, Certificate: SFCC

The objectives of this program are to educate students for entry-level employment in the finance/credit field; and to provide continuing education opportunities for people currently working in the field, support courses for other business programs, and general financial and credit education to meet community needs.

The program is based on information from banks, mortgage companies, finance companies, credit unions and retail credit institutions in the Spokane area.

FIRST YEAR

First Quarter

ACCT	101	Principles of Accounting[1]	5
CRMGT	190	Business Credit Principles	3
GBUS	100	Money Management	3
GBUS	108	eBusiness	2
MMGT	181	Leadership Training-DEC[2]	1
		Total	**14**

Second Quarter

BT	107	Business Communications[3]	3
CAPPS	112	Excel	1
CRMGT	140	Financial Statement Analysis	3
CRMGT	150	Introduction to Investments	2
GBUS	103	Basic Business Math and Electronic Calculators [4]	5
MMGT	182	Leadership Training-DEC[2]	1
		Total	**15**

Third Quarter

BT	108	Business Communications[3]	3
CRMGT	110	Introduction to Finance	3
CRMGT	220	Credit Law/Collection Techniques	3
GBUS	205	Business Law	5
MMGT	223	Customer Service	3
		Total	**17**

SECOND YEAR

Fourth Quarter

GBUS	101	Introduction to Business	5
MMGT	101	Principles of Management	5
MMGT	111	Mid-Management Seminar OR	
MMGT	112	Mid-Management Seminar OR	
MMGT	113	Mid-Management Seminar OR	
MMGT	183	Leadership Training-DEC[2]	1
MMGT	267	Cooperative Education Work Experience	2
		Computer Elective/Information Systems	2
		Total	**15**

Fifth Quarter

BT	272	Business Correspondence[5]	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
GBUS	280	Human Relations in Business[6]	5
		Total	**15**

Sixth Quarter

ECON	100	Fundamentals of Economics[7]	5
MMGT	211	Marketing	5
		Computer Elective/Information Systems	1
		Business Elective	3
		Total	**14**

90 credits are required for an A.A.S. degree.

[1] *May substitute ACCT 103 and 104.*
[2] *May substitute GBUS 105 for MMGT 181, 182, 183.*
[3] *May substitute ENG 101 for BT 107 and 108.*
[4] *May substitute GBUS 217 for GBUS 103.*
[5] *May substitute ENG 205 for BT 272*
[6] *May substitute HS 136.*
[7] *May substitute ECON 201 for ECON 100.*

Certificate

First Quarter

ACCT	101	Principles of Accounting[1]	5
CRMGT	190	Business Credit Principles	3
GBUS	100	Money Management	3
GBUS	108	eBusiness	2
MMGT	181	Leadership Training-DEC[2]	1
IS		Computing Elective/Information Systems	1
		Total	**15**

Second Quarter

BT	107	Business Communications[3]	3
CRMGT	140	Financial Statement Analysis	3
CRMGT	150	Introduction to Investments	2
GBUS	103	Basic Business Math and Electronic Calculators[4]	5
MMGT	223	Customer Service	3
		Total	**16**

Third Quarter

BT	108	Business Communications[3]	3
CAPPS	112	Excel	1
CRMGT	110	Introduction to Finance	3
CRMGT	220	Credit Law/Collection Techniques	3
GBUS	205	Business Law	5
		Total	**15**

46 credits are required for a certificate.

Keyboarding proficiency of 35 wpm required.

CERTIFICATE ELECTIVES MAY BE CHOSEN FROM:

ACCT	107	Accounts Receivable Procedures	1
ACCT	108	Inventory Costing Procedures	1
ACCT	109	Fixed Asset Accounting	1
ACCT	115	Accounting for Current Liabilities	1
BT	155	Records Information Management	3
BT	257	Presentation Graphics/Publishing	3
CAPPS	110	Word	1
CAPPS	114	Access	1
CAPPS	116	PowerPoint	1

[1] *May substitute ACCT 103 and 104.*
[2] *May substitute GBUS 105 for MMGT 181 and 182.*
[3] *May substitute ENG 101 for BT 107 and 108.*
[4] *May substitute GBUS 217 for GBUS 103.*

CRIMINAL JUSTICE

A.A.S. Degree: SCC

The criminal justice curriculum is made up of courses and a carefully selected group of general education requirements designed to prepare each student for a career in the field of criminal justice. These courses prepare students with theory and practical skills in the areas of patrol procedures, criminal procedures, marksmanship, physical training, investigations, interview, communications and human relations.

Students are carefully counseled in order to ensure they are able to enter a law enforcement agency of their choice. This counseling process includes physical, mental and emotional areas, as well as background requirements. Students are required to take various examinations common to the field of criminal justice. These examinations include quarterly physical training assessments. Passing these physical training assessments is a prerequisite to CJ 237.

Students in this field are encouraged to seek academic counseling. Only a portion of this two-year A.A.S. degree is transferable to four-year institutions. Students interested in four-year degrees should inquire at the college to which they plan to transfer for specific information.

Credits from the Police Academy Training can apply toward meeting the course requirements of this program.

A prior criminal, traffic or drug history may exclude individuals from employment. For further information, contact a program instructor.

This is a recommended course of study. Students may take required courses any time they are offered. (Not all classes are offered every quarter.)

FIRST YEAR

AQUAT	101	Beginning Swimming	1
CJ	101	Introduction to Criminal Justice	5
CJ	102	Administration of Justice	5
CJ	103	Police Organization and Administration	3
CJ	104	Crime Scene Diagramming	5
CJ	105	Introduction to Traffic Investigation[1]	3
CJ	132	Criminal Justice Physical Training[2]	1
CJ	133	Criminal Justice Physical Training[2]	1
CJ	150	Criminal Justice Report Writing	5
ENG	101	English Composition[3]	5
ENG	109	Speech Composition[3] AND	
SPCH	101	Introduction to Speech Communication[3]	5
SPCH	102	Interpersonal Communication[3]	5
		Math[3]	5
		Recommended Electives List A	10
		Total	**59**

SECOND YEAR

CJ	200	Officer's Survival[4]	5
CJ	201	Laws of Arrest, Search and Seizure[8]	5
CJ	203	Police Interviewing Techniques	3
CJ	205	Introduction to Criminal Law[8]	5
CJ	209	Human Relations	3
CJ	210	Police Psychology	3
CJ	211	Crime Scene Investigations[5]	6
CJ	212	Professional Development	1
CJ	228	Ethics - Standards of Conduct	3
CJ	235	Firearms Safety[6]	2
CJ	236	Firearms Qualifications[6]	2
CJ	237	Criminal Justice Self-defense[7]	3
CJ	241	Criminal Justice Physical Training[2]	1
CJ	242	Criminal Justice Physical Training[2]	1
CJ	243	Criminal Justice Physical Training[2]	1
ENG	205	Technical Writing[3]	5
		Recommended Electives List A	5
		Recommended Electives List B	3
		Total	**57**

RECOMMENDED ELECTIVES LIST A:

BIOL	101	General Biology	5
BT	101	Keyboarding	5
BT	160	Job Preparation Techniques	3
CHEM	101	General Chemistry	5
CIS	110	Introduction to Computer Applications	5
GBUS	102	Math Skills for Business	3
GBUS	103	Basic Business Math and Electronic Calculators	5
GBUS	280	Human Relations in Business	5
HSEAR	101	American Sign Language I	5
HUMAN	101	Introduction to Humanities	5
HUMAN	102	Introduction to Women's Studies	5
PHIL	101	Introduction to Philosophy	5
PHIL	210	Ethics	5
PSYCH	101	Introduction to Psychology	5
RUSSN	101	Elementary Russian	5
SOC	101	Introduction to Sociology	5
SOC	221	Race and Ethnic Relations	5
SOC	261	Crime and Justice	5
SPAN	101	Elementary Spanish	5

RECOMMENDED ELECTIVES LIST B:

CJ	265	Service Learning Volunteer Project AND	2
GENST	155	Service Learning Project	1
CJ	266	Cooperative Education Seminar AND	1
CJ	267	Cooperative Education Work Experience OR	1-2
CJ	288	Cooperative Education Work Experience (No Seminar)	1-3
		Any Criminal Justice course	

116 credits are required for an A.A.S. degree.

[1] *CJ 101, 102 and 104 are prerequisites.*

[2] *Requires medical insurance and a doctor's release if needed; requires fitness assessment. If assessed below minimum fitness level, CJ 208 is a recommended prerequisite. PE 186 (for audit) is required to be taken concurrently with CJ 132, 133, 208, 241, 242 and 243.*

[3] *May be substituted with any course or combination of courses approved by the instructional dean.*

[4] *CJ 150, 201, 205 and 237 are prerequisites.*

[5] *CJ 104, 150, 201, 203 and 205 are prerequisites.*

[6] *CJ 235 and 236 must be taken concurrently.*

[7] *Passing one quarter of CJPT is required before taking this course.*

[8] *CJ 101 and 102 are prerequisites.*

CULINARY ARTS

A.A.S. Degree: SCC

Basic and advanced procedures in food preparation are included in the two-year culinary arts program. A detailed study is made of the various cooking methods for meats, fish, poultry, vegetables, soups and sauces. Menu terminology and cooking terms are defined and illustrated. Students are given the opportunity to study management factors affecting food cost control, specifications and standards for foods, sanitation, kitchen planning, kitchen equipment, and personnel policies.

FIRST YEAR

First Quarter

APLED	121	Applied Written Communication[1]	4
CUL	110	Introduction to Culinary Arts	5
CUL	115	Food Sanitation[2]	3
HM	112	Hospitality Mathematics	3
ISFTY	111	Industrial First Aid	2
		Total	**17**

Second Quarter

CUL	124	Cooking Applications I[1]	7-10
CUL	126	Food Science	5
HM	116	Nutrition for Chefs and Restaurant Managers	3
		Total	**15-18**

Third Quarter

CUL	123	Espresso	2
CUL	127	Banquet Service	2
CUL	131	A la Carte Service	9
HM	130	Human Relations[1]	5
		Total	**18**

SECOND YEAR

Fourth Quarter

CUL	253	Advanced Cooking Theory	5
CUL	254	A la Carte Cooking I	10
CUL	266	Cooperative Education Seminar[3] AND	1
CUL	267	Cooperative Education Work Experience[3] OR	4
CUL	288	Cooperative Education Work Experience (No Seminar)	5
		Total	**20**

Fifth Quarter

BAK	140	Yeast Doughs	1
CUL	243	Theory of Restaurant Baking	5
CUL	244	Restaurant Baking Applications	10
CUL	265	Hospitality Cost Controls	5
		Total	**21**

Sixth Quarter

CUL	255	Menu Planning	3
CUL	260	Presidential	1
CUL	263	Theory of Modern Cuisine	5
CUL	264	A la Carte Cooking II	9
		Total	**18**

109-112 credits are required for an A.A.S. degree.

A 2.0 grade or better must be maintained in all commercial baking (BAK), culinary arts (CUL) or hotel/restaurant management (HM) courses for an A.A.S. degree.

[1] *This course may be substituted with any course or combination of courses approved by the instructional dean.*

[2] *This course is required for certification by the Educational Foundation of the National Restaurant Association.*

[3] *CUL 266 and 267 (concurrent enrollment) OR CUL 288 may be taken during the second year.*

CUSTOMER SERVICE REPRESENTATIVE

A.A.S. Degree: SCC

The customer service representative program prepares students to work as commercial or residential service representatives in the telephone industry and also for similar positions in major department stores, collection agencies, credit bureaus, airlines, travel agencies, medical insurance agencies, public utilities and telephone answering services. This program is designed to give the students the necessary knowledge and skills to deal directly with customers in matters of credit application, bill collection, making arrangements for equipment installation and servicing, and acting as the company representative in special problems that may arise.

FIRST YEAR

First Quarter

BT	090	Basic Grammar for Business II	5
BT	102	Document Processing	5
BT	151	Business Student Preparation	5
CATT	102	Introduction to Outlook	2.5
		Total	**17.5**

Second Quarter

BT	109	Business Communications	5
BT	165	Word Processing	5
BT	231	Office Procedures	5
GBUS	101	Introduction to Business	5
		Total	**20**

Third Quarter

ACCT	101	Principles of Accounting OR	
ACCT	151	College Accounting I	5
BT	201	Information Processing	5
GBUS	103	Basic Business Math and Electronic Calculators	5
		Total	**15**

SECOND YEAR

Fourth Quarter[1]

BT	202	Advanced Information Processing	5
BT	272	Business Correspondence	5
ECON	100	Fundamentals of Economics OR	
ECON	201	Introduction to Macroeconomics	5
		Total	**15**

Fifth Quarter

BT	250	Information Technology	5
GBUS	205	Business Law	5
SPCH	102	Interpersonal Communication	5
		Total	**15**

Sixth Quarter

BT	160	Job Preparation Techniques	3
BT	260	Administrative Office Management	5
BT	285	Administrative Professional Internship	2
GBUS	280	Human Relations in Business	5
		Total	**15**

97.5 credits are required for an A.A.S. degree.

[1] To enter the fourth quarter of this program, students must pass competency tests in the following areas:
  - Math (fractions, percentages, etc.)
  - Writing (write a basic letter, memo and/or e-mail with correct spelling, punctuation, grammar, etc.)
  - Format documents from unarranged copy in a timed situation (letters, memos, reports and tables) using Microsoft Word.
  - Key at 40 wpm.

DENTAL ASSISTING

A.A.S. Degree, Certificate: SCC

A one-year program designed to prepare the student for employment as a chairside assistant to the dentist.

Chairside area: record medical and dental history; prepare treatment room; prepare patient for treatment; chart patient information; assist the dentist in general and specialty treatment of patient; sterilize and disinfect dental instruments; expose, process and mount radiographs; teach brushing and flossing; prepare various dental materials; perform expanded functions that are legal in the state of Washington; and order and maintain dental supplies.

Reception area: appoint patients for treatments, maintain a patient recall system, file and maintain patient and office records, complete patient insurance forms and make financial arrangements with patients.

This program is accredited by the American Dental Association. Students who successfully complete the program are eligible to take the Dental Assisting National Board exam.

Admission Prerequisite/Requirements:
- High School Diploma or GED certificate
- Appropriate scores in one of the following: ASSET or Compass

Admission Recommendations:
- Computer skills
- Active email account

Each required course for graduation must be completed with a 2.0 grade or better before proceeding to the next quarter.

Professional Curriculum[1]

First Quarter

DENT	111	Introduction to Dental Assisting	5
DENT	112	Chairside Related Theory	4
DENT	114	Introduction to Dental Radiology	3
DENT	116	Dental Restorative Techniques	3
DENT	118	Dental Anatomy	4
ENG	101	English Composition	5
		Total	**24**

Second Quarter

DENT	121	Intermediate Chairside Assisting	6
DENT	122	Chairside Related Theory	4
DENT	124	Advanced Dental Radiology	2
DENT	126	Dental Restorative Techniques	4
DENT	129	Chairside Clinical Experience	2
SPCH	102	Interpersonal Communication	5
		Total	**23**

Third Quarter

DENT	131	Advanced Chairside Assisting	6
DENT	136	Dental Restorative Techniques	2
DENT	138	Office Management	3
DENT	139	Chairside Clinical Experience	8
		Total	**19**

Liberal Arts Curriculum (Optional)[2]

BIOL	101	General Biology	5
CHEM	101	General Chemistry	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
PSYCH	101	Introduction to Psychology	5
SOC	101	Introduction to Sociology	5
		Math/Science Elective	5
		Communication or Humanities Electives	10
		Social Science Elective	5
		Total	**45**

111 credits are required for an A.A.S. degree and 66 credits are required for a certificate.

Note: All electives must be numbered 100 or above.

Students may repeat a dental assisting course once, but it must be repeated within two years.

[1] The student must maintain a 2.0 grade in all subjects.

[2] Student receives associate in applied science degree in dental assisting. (For an A.A.S. degree in dental assisting, the student must complete the above designated courses.) All courses must be completed with a 2.0 grade or better.

DIAGNOSTIC MEDICAL SONOGRAPHY

A.A.S. Degree: SCC

Diagnostic Medical Sonography Technology is an allied health profession in which practitioners perform diagnostic and monitoring procedures using sound waves. The sonographer performs examinations at the request or direction of a physician. Through subjective sampling and/or recording, the sonographer proceeds with the examination to create an easily definable foundation of data from which a correct anatomic and physiologic diagnosis may be established for each patient.

The various types of ultrasound imaging equipment require a highly skilled sonographer to obtain the imaging information or other data required. The sonographer must obtain appropriate history, physical findings, and pertinent laboratory data to adapt the imaging techniques to obtain comprehensive and diagnostic information.

Admission Prerequisites/Requirements:

- Anatomy and Physiology 242 and 243
- Math 099
- Chemistry 161
- Biology 101
- All math and science prerequisites must have been completed within the last five years with a grade of 2.0 or better.
- Students may repeat a professional class once, but it must be repeated within two years.

FIRST YEAR

First Quarter

CHEM	120	Organic and Biochemistry for the Health Sciences. . . .	5
ENG	101	English Composition	5
SONO	111	Diagnostic Ultrasound I	4
VASC	112	Vascular Fundamentals	4
		Total 18	

Second Quarter

SONO	121	Human Cross-Section Anatomy.	4
SONO	125	Ultrasound Physics and Instrumentation	5
SPCH	127	Leadership Development	3-5
VASC	122	Vascular Procedures.	4
		Total 16-18	

Third Quarter

NCT	133	Noninvasive Cardiovascular Fundamentals	5
SONO	131	Diagnostic Ultrasound II.	5
SONO	135	Ultrasound Physics and Instrumentation II.	5
VASC	132	Cardiovascular Physiology	5
		Total 20	

Fourth Quarter

SONO	141	Diagnostic Ultrasound III	4
SONO	142	Sonography Clinical Preparation	4
SONO	143	Sonography Clinical Observation.	6
		Total 14	

SECOND YEAR

Fifth Quarter

SONO	251	Advanced Sonography	9
SONO	253	Sonography Clinical I	6
		Total 15	

Sixth Quarter

SONO	263	Sonography Clinical II.	13
		Total 13	

Seventh Quarter

SONO	273	Sonography Clinic III.	13
		Total 13	

109-111 credits are required for an A.A.S. degree.

A 2.0 grade point must be maintained quarterly in each course before proceeding to the next quarter.

DIESEL/HEAVY DUTY EQUIPMENT

A.A.S. Degree: SCC

Diesel/heavy duty mechanics repair and maintain trucks, buses, logging, mining, agricultural and construction equipment. In addition, they maintain and repair diesel and gasoline engines, compressors and pumps.

Students may enter the program any quarter.

FIRST YEAR

First Quarter

APLED	121	Applied Written Communication[1]	4
HEQ	111	Basic Electrical Theory	7
HEQ	112	Basic Electrical Applications	9
		Total 20	

Second Quarter

APLED	112	Applied Mathematics[1].	3
HEQ	121	Basic Principles of Engine Theory.	7
HEQ	122	Basic Engine Applications	9
		Total 19	

Third Quarter

APLED	123	Leadership Skills for Business and Industry[1].	3
CIS	105	Computer Fundamentals for Vocations I[1]	1
HEQ	131	Principles of Power Train Theory.	7
HEQ	132	Power Train Applications.	9
		Total 20	

SECOND YEAR

Fourth Quarter

APLED	125	Employment Preparation[1].	3
HEQ	241	Heavy Equipment Hydraulic Theory	7
HEQ	242	Heavy Duty Equipment Hydraulic Application.	9
		Total 19	

Fifth Quarter

AGGEN	152	Arc Welding	4
AGGEN	153	Oxy-acetylene Welding	4
HEQ	251	Practical Shop Procedures.	7
HEQ	252	Practical Shop.	8
		Total 23	

Sixth Quarter[2]

HEQ	261	Practical Shop Procedures.	8
HEQ	262	Practical Shop.	5
HEQ	294	Special Problems	3
ISFTY	111	Industrial First Aid	2
		Total 18	

119 credits are required for an A.A.S. degree.

1 *This related education requirement may be met by any course or combination of courses approved by the instructional dean.*

2 *Two credits of HEQ 266 and 15 credits of HEQ 267 or 17 credits of HEQ 288 with no seminar may be substituted for sixth quarter.*

EARLY CHILDHOOD EDUCATION

A.A.S. Degree, Certificate: SFCC

The early childhood education program provides experiences in educational theory in the areas of social, emotional, cognitive, physical/motor and creative development for children from birth through age 8. Courses also are available for caregivers of school-age children, ages 5 through 14 years. Now that ongoing research reveals the significance of early development, professional preparation has become essential to anyone pursuing a career in the education and care of young children. Courses are based on the Washington State Skill Standards and are offered both day and evening.

SFCC Early Childhood Education program options:

- Certificates of Specialization (20-30 credits) — eight certificates that focus on a specific area of study
- Early Childhood Education Certificate (57-60 credits) — contains the ECED core content courses

- Associate in Applied Science (AAS) degree (90-93 credits) - contains the same course work as the ECED certificate above, plus supporting courses and electives which may be modified for articulation into a BA degree.

- Associate of Applied Science Transfer degree (AAS-T) (91-92 credits) -contains ECED core content with the option to transfer to accepting four year schools.

- Associate of Arts (AA) degree (90 credits) - Includes 15 credits of electives in ECED that transfers to four year schools.

- Articulation with area High Schools Articulates college credits for completion of specified High School ECED courses.

- State Training and Registry System (STARS) Accepts college credits to meet STARS requirements.

Outlook for employment in this field is excellent due to current research and recognition of the importance of early development and learning. The SFCC Early Childhood Education program has achieved recognition in our community and region. Regional employers contact our program seeking educated early childhood employees for positions such as: Lead teacher, Family child care provider, School-age care provider, Teachers aide/assistant, Program specialist, Parent-school liaison, Program supervisor, Early education coordinator, Center director/manager, Assistant director/manager, Foster care provider

FIRST YEAR

First Quarter

ECED	101	Issues and Trends in Early Childhood Education	5
ECED	102	Observation and Documentation	1-2
ECED	124	Methods of Learning	5
GENST	106	College Success	3
		Total	**14-15**

Second Quarter

ECED	135	Infant/Toddler Care and Education	5
ECED	190	Child Development	5
ENG	101	English Composition	5
		Total	**15**

Third Quarter

ECED	226	Curriculum Development	5
ECED	230	Learning Environments	5
ED	204	Introduction to Special Education	5
HLTH	174	First Aid	3
		Total	**18**

SECOND YEAR

Fourth Quarter

ECED	132	Fostering Social Competence	5
ECED	290	School-age Development	5
GBUS	102	Math Skills for Business OR	
MATH	090	Pre-Algebra or higher	3-5
		Total	**13-15**

Fifth Quarter

ECED	254	Dynamics of Family Relationships	5
ECED	281	Capstone Practicum	5
		Approved Elective[1]	5
		Total	**15**

Sixth Quarter

ECED	282	Practicum I	5
HS	136	Improving Interpersonal Communication	5
		Approved Elective [1]	5
		Total	**15**

90-93 credits are required for an A.A.S. degree.

[1] *Elective may be selected with the approval of an early childhood education instructor.*

Certificate

ECED	101	Issues and Trends in Early Childhood Education	5
ECED	102	Observation and Documentation	1-2
ECED	124	Methods of Learning	5
ECED	132	Fostering Social Competence	5
ECED	135	Infant/Toddler Care and Education	5

ECED	190	Child Development	5
ECED	226	Curriculum Development	5
ECED	230	Learning Environments	5
ECED	281	Capstone Practicum	5
ENG	101	English Composition	5
GBUS	102	Math Skills for Business OR	
MATH	090	Pre-Algebra or above	3-5
GENST	106	College Success	3
HS	136	Improving Interpersonal Communication	5
		Total	**57-60**

57-60 credits are required for a certificate. Valid first aid card required for certificate.

Early Childhood Education Certificates of Specialization

Infant Toddler Specialist

ECED	102	Observation and Documentation	1-2
ECED	132	Fostering Social Competence	5
ECED	135	Infant/Toddler Care and Education	5
ECED	190	Child Development	5
ECED	254	Dynamics of Family Relationships	5
		Total	**21-22**

Curriculum Development Specialist

ECED	102	Observation and Documentation	1-2
ECED	124	Methods of Learning	5
ECED	190	Child Development	5
ECED	226	Curriculum Development	5
ECED	230	Learning Environments	5
		Total	**21-22**

Early Childhood Specialist I

ECED	102	Observation and Documentation	1-2
ECED	124	Methods of Learning	5
ECED	132	Fostering Social Competence	5
ECED	190	Child Development	5
ECED	230	Learning Environments	5
		Total	**21-22**

Early Childhood Specialist II

Must have Early Childhood Specialist I

ECED	101	Issues and Trends in Early Childhood Education OR	
ECED	226	Curriculum Development	5
ECED	254	Dynamics of Family Relationships	5
ECED	281	Capstone Practicum	5
ECED	282	Practicum I	5
		Total	**20**

Family Services Advocate

ECED	190	Child Development	5
ECED	254	Dynamics of Family Relationships	5
HS	136	Improving Interpersonal Communication	5
HS	281	Practicum I	5
		Total	**20**

Family Child Care Specialist

ACCT	103	Fundamental Bookkeeping Procedures OR	
SBM	101	How to Start a Small Business	3-5
ECED	101	Issues and Trends in Early Childhood Education OR	
ECED	124	Methods of Learning	5
ECED	102	Observation and Documentation	1-2
ECED	132	Fostering Social Competence	5
ECED	190	Child Development	5
ECED	254	Dynamics of Family Relationships	5
		Total	**24-27**

Child Care Administration Specialist

ECED	101	Issues and Trends in Early Childhood Education	5
ECED	190	Child Development	5
ECED	260	Child Care Administration	5
ECED	290	School-age Development	5
SBM	101	How to Start a Small Business	5
		Total	**25**

School-age Care Specialist

ECED	102	Observation and Documentation	1-2
ECED	260	Child Care Administration	5
ECED	270	School-age Creative Activities	5
ECED	280	School-age Guidance	5
ECED	290	School-age Development	5
		Total	**21-22**

EDUCATION PARAPROFESSIONAL

A.A. Degree, A.A.S. Degree, Certificate: SFCC

General Education Emphasis

Special Education Emphasis

Early Childhood Education Emphasis

The education paraprofessional program provides theory and practice in the skills for working as effective members of instructional teams. The core curriculum focuses on current issues and historical foundations of regular and special education, instructional strategies, behavior management, human development and interpersonal skills in the context of a diverse society. Supervised practicum opportunities for hands-on experiences in schools are provided throughout this course of study.

Certificate: This option may be most appropriate for those obtaining a degree in Early Childhood Education wishing to extend their knowledge of working with children with special needs. As of January 2002, new federal guidelines require most paraprofessionals in public K-12 schools to complete a two-year program.

A.A.S. Education Paraprofessional, General Education emphasis: Courses address the Washington State Core Competencies for Para-educators and the Washington State Skill Standards. An education paraprofessional works under the supervision of a licensed/certificated staff member to assist and support educational services. The goal is to support learners experiencing delays and/or those who are learning English as well as typical students within a general education setting.

A.A.S. Education Paraprofessional, Special Education Emphasis: Courses include the core curriculum described above yet delve deeper into providing services for children identified with disabilities such as learning disabilities, emotional and behavioral disorders, and developmental disabilities.

A.A.S. Education Paraprofessional, Early Childhood Emphasis: Courses include the core curriculum described above and is intended to meet the needs of persons who wish to become paraeducators in grades K-3.

A.A. Transfer Degree: If you intend to transfer to a 4-year college to complete a teacher-training program leading to certification, you must follow the Associate of Arts degree. It is important to contact the intended transfer institution since prerequisites, transferability, and program requirements vary around the state.

FIRST YEAR

First Quarter

ED	204	Introduction to Special Education	5
ENG	101	English Composition	5
GBUS	102	Math Skills for Business OR	
MATH	090	Pre-Algebra	3-5
		Total	**13-15**

Second Quarter

ED	202	Survey of Education	5
HS	136	Improving Interpersonal Communication	5
PSYCH	101	Introduction to Psychology	5
		Total	**15**

Third Quarter

ECED	190	Child Development OR	
PSYCH	210	Conception through Adolescent Developmental Psychology	5
ED	280	Behavior/Classroom Management	5
HSGER	115	Multi-Cultural Perspectives in Human Services	5
		Total	**15**

SECOND YEAR

Fourth Quarter

ED	252	Social/Emotional Development	5
HLTH	174	First Aid	3
SPCH	121	Job Communication Skills	2
		Elective[1]	5
		Total	**15**

General Education Emphasis

Fifth Quarter

ED	281	Education/Special Education Practicum I	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
		Elective[1]	4
		Elective[2]	3
		Total	**17**

Sixth Quarter

ECED	254	Dynamics of Family Relationships	5
ED	282	Education/Special Education Practicum II	5
		Additional English or Math elective	5
		Total	**15**

Special Education Emphasis

Fifth Quarter

ED	270	Introduction to Developmental Disabilities	5
ED	281	Education/Special Education Practicum I	5
		Elective[1]	4
		Elective[2]	3
		Total	**17**

Sixth Quarter

ED	275	Learning Disabilities	5
ED	282	Education/Special Education Practicum II	5
HSEAR	101	American Sign Language I	5
		Total	**15**

Early Childhood Education Emphasis

Fifth Quarter

ECED	132	Fostering Social Competence	5
ECED	230	Learning Environments	5
ED	281	Education/Special Education Practicum I	5
		Total	**15**

Sixth Quarter

ECED	124	Methods of Learning	5
ECED	254	Dynamics of Family Relationships	5
ED	282	Education/Special Education Practicum II	5
		Elective[2]	2
		Total	**17**

90-92 credits are required for an A.A.S. degree.

[1] Electives to be approved by instructor.

[2] Technology course needs to be from IS, CAPPS, GRDSN or other Internet related course.

Certificate

For a certificate of completion students must complete the following courses:

First Quarter

ED	204	Introduction to Special Education	5
ED	252	Social/Emotional Development	5
ED	275	Learning Disabilities	5
		Total	**15**

Second Quarter

ED	270	Introduction to Developmental Disabilities	5
ENG	101	English Composition	5
HS	136	Improving Interpersonal Communication	5
		Total	**15**

Third Quarter

ED	280	Behavior/Classroom Management	5
GBUS	102	Math Skills for Business	3
HLTH	174	First Aid	3
		Choose from the list below	4
		Total	**15**

PLUS ONE OR MORE OF THE FOLLOWING COURSES OR COURSE(S) APPROVED BY INSTRUCTOR:

CAPPS	102	Introduction to Office	1
CAPPS	104	Windows	1
CAPPS	110	Word	1
CAPPS	112	Excel	1
CAPPS	114	Access	1
CAPPS	116	PowerPoint	1
ECED	101	Issues and Trends in Early Childhood Education	5
ECED	290	School-age Development	5
ED	205	Tutor Training	1
ED	206	Advanced Tutor Training	1
ED	208	Tutorial Practicum	1-2
ED	281	Education/Special Education Practicum I	5
ED	282	Education/Special Education Practicum II	5
HS	102	Introduction to Human Services	5
HS	105	Child Abuse	5
HS	277	Human Sexual Development	3
HSEAR	101	American Sign Language I	5
HSEAR	151	Education of the Hearing Impaired	5
HSSUB	172	Chemical Dependency in the Family	3

45 credits are required for a certificate.

ELECTRICAL MAINTENANCE AND AUTOMATION

A.A.S. Degree: SCC

ELECTRICAL MAINTENANCE AND AUTOMATION OPTION

POWER SYSTEMS MAINTENANCE OPTION

Electrical maintenance and automation technicians are responsible for the maintenance, testing, repair, and/or replacement of the electrical systems and controls found in modern industrial plants and large commercial buildings.

As the electrical systems become more sophisticated, so must the skills of the electrical maintenance and automation technician. By mixing the theoretical with practical hands-on lab experiences using modern up-to-date industrial equipment and techniques, the student will be prepared for a challenging career in electrical maintenance.

Students are offered several options within the electrical maintenance and automation program. They may choose to complete an A.A.S. degree with specialized training in one of the following areas: electrical maintenance and automation or power systems maintenance. Electrical trainee or electrical sales option certificates also are offered.

Students must maintain a 2.0 GPA in each course of the major discipline before advancing to the subsequent quarter. Students not meeting this minimum are required to repeat the deficient course before progressing.

Electrical maintenance and automation courses may be taken whenever they are offered and in any sequence as long as the student has fulfilled any prerequisites or has instructor permission. This plan allows a great deal of flexibility for retraining people in industry.

Potential students should possess a mechanical aptitude, good reading comprehension skills and the ability to pass a color blindness test.

FIRST YEAR

First Quarter

APLED	121	Applied Written Communication[1]	4
ELMT	111	Electrical Math	5
ELMT	112	Electrical Theory	5
ELMT	113	Safety and Tools	4
ELMT	114	Materials and Fasteners	4
MET	103	Introduction to Computers for Technology	3
		Total	**25**

Second Quarter

ELMT	122	DC Circuits	5
ELMT	123	AC Theory	5
ELMT	124	Motor Maintenance	4
ELMT	262	Raceways	4
		Total	**18**

Third Quarter

APLED	123	Leadership Skills for Business and Industry	3
ELMT	131	Solid State	5
ELMT	132	DC Generators and Motors	4
ELMT	135	DC Motor Controls	4
ELMT	252	Transformers and Industrial Lighting	5
		Total	**21**

SECOND YEAR

Fourth Quarter

APLED	125	Employment Preparation[1]	3
ELMT	133	AC Motors and Alternators	4
ELMT	134	Introduction to AC Controls	5
ELMT	241	AC Motor Controls	5
ELMT	251	National Electric Code	4
		Total	**21**

Electrical Maintenance and Automation Option

Fifth Quarter

ELMT	242	Advanced AC Controls	5
ELMT	243	Introduction to Programmable Controllers	4
ELMT	253	National Electric Code - Article 430	4
ELMT	254	Programmable Controller Applications	5
ISFTY	111	Industrial First Aid	2
		Total	**20**

Sixth Quarter

ELMT	244	Solid State Motor Controls[2]	4
ELMT	263	Wiring Techniques[2]	4
ELMT	265	Advanced Programmable Controllers[2]	5
ELMT	268	Programmable Controller Integration[2]	5
		Total	**18**

Power Systems Maintenance Option[3]

Fifth Quarter

FLPT	271	Pneumatic Theory	5
FLPT	272	Pneumatic Math and Symbols	4
FLPT	273	Hydraulic Theory	5
FLPT	274	Applied Hydraulics	4
ISFTY	111	Industrial First Aid	2
		Total	**20**

Sixth Quarter

ELMT	266	Cooperative Education Seminar AND	2
ELMT	267	Cooperative Education Work Experience OR	16
ELMT	288	Cooperative Education Work Experience (No Seminar)	18
		Total	**18**

123 credits are required for an A.A.S. degree for any option.

The cooperative education supervisor must approve the worksite chosen for the cooperative education work experience.

[1] *This related education requirement may be met by any alternate course or combination of courses approved by the instructional dean.*

[2] *Cooperative education may be substituted with department permission only (ELMT 266, Cooperative Education Seminar, 2 credits, and ELMT 267, Cooperative Education Work Experience, 16 credits). These courses must be taken in the final quarter.*

[3] *Only students who have received prior approval from the Bonneville Power Administration are eligible for this degree option.*

ELECTRICAL TRAINEE

Certificate: SCC

The electrical trainee certificate program has been designed to meet a large variety of student and electrical industry needs. The student will be required to take six of the electrical maintenance technician (ELMT) core classes along with vocational-related courses. In addition to the core classes, the student may select the electrical sales option with the cooperative education work experience component or choose four additional courses from the ELMT list. This selection will be made with the aid of professional/technical counselors, faculty or industry advisers to best meet the needs of the individual student. Students who complete the certificate requirements will be ready to seek employment as sales associates in the electrical industry or as electrical trainees and can continue to develop their electrical skills through on-the-job work experience. Students may enter the program whenever the courses are offered. It should be noted that some courses do have prerequisites. ELMT courses may be taken in any sequence providing the student has fulfilled any prerequisites or has instructor permission.

First Quarter

APLED	121	Applied Written Communication[1]	4
ELMT	111	Electrical Math	5
ELMT	112	Electrical Theory	5
ELMT	114	Materials and Fasteners	4
		Choose one additional ELMT course	4
		Total	**22**

Second Quarter

ELMT	122	DC Circuits	5
ELMT	123	AC Theory	5
ELMT	262	Raceways	4
		Choose one additional ELMT course	4
		Total	**18**

Third Quarter

APLED	125	Employment Preparation[1]	3
		Choose four additional ELMT courses	16-20
		Total	**19-23**

59-63 credits are required for a certificate.

Electrical Sales Option
First Quarter

APLED	121	Applied Written Communication[1]	4
ELMT	111	Electrical Math	5
ELMT	112	Electrical Theory	5
ELMT	114	Materials and Fasteners	4
		Choose one additional ELMT course	4
		Total	**22**

Second Quarter

APLED	123	Leadership Skills for Business and Industry	3
ELMT	122	DC Circuits	5
ELMT	123	AC Theory	5
ELMT	262	Raceways	4
		Choose one additional ELMT course	4
		Total	**21**

Third Quarter

APLED	125	Employment Preparation[1]	3
ELMT	266	Cooperative Education Seminar AND	2
ELMT	267	Cooperative Education Work Experience OR	16
ELMT	288	Cooperative Education Work Experience (No Seminar)	18
		Total	**21**

64 credits are required for a certificate.

[1] *This related education requirement may be met by any alternate course or combination of courses approved by the instructional dean.*

ELECTRONICS ENGINEERING TECHNICIAN

A.A.S. Degree, Certificate: SCC

AVIONICS OPTION

BROADCAST AND RF COMMUNICATIONS TECHNICIAN OPTION

COMPUTER AND DATA COMMUNICATIONS TECHNICIAN OPTION

ELECTRONICS MAINTENANCE TECHNICIAN OPTION

ELECTRONICS ENGINEERING TECHNICIAN CERTIFICATE

The electronics industry of today's highly technological world needs technicians prepared for the dynamic field of microcomputer-based electronic equipment maintenance. The program provides a seven-quarter, comprehensive curriculum to prepare the student to meet this need.

State-of-the art concepts are taught, as well as practical laboratory techniques, which provide the circuit analysis skills necessary for electronic technicians. Also included are studies in communication skills, computational skills and human relations skills.

Flexibility is provided to the student who chooses to receive a certificate of completion in electronics. This certificate is offered after successful completion of four specific quarters of electronics study and related courses.

The associate in applied science degree option is most advantageous in securing employment in the electronics industry. To qualify for this degree, the student must successfully complete specific electronic courses, as well as student-selected advanced electronic options for a total of seven quarters of study. The degree candidate also must successfully complete specific related courses.

Prerequisites:

Appropriate ASSET scores in math, reading and writing (or alternative courses) must be met before admission into the program is granted. Written permission of the department chair or the technical division dean may supersede requirements.

FIRST YEAR
First Quarter

ELECT	110	Computer Fundamentals for Electronics	2
ELECT	111	Fundamentals of DC/AC Circuits	7
ELECT	112	DC/AC Circuit Lab	5
ELECT	113	DC/AC Circuit Math	5
		Total	**19**

Second Quarter

APLED	121	Applied Written Communication[1]	4
ELECT	121	Advanced DC/AC Circuits	9
ELECT	122	Advanced DC/AC Circuits Lab	5
ELECT	123	Advanced DC/AC Circuit Math	5
		Total	**23**

Third Quarter

ELECT	134	Printed Circuit Board/Surface Mount Technology Design and Repair	1
ELECT	136	Solid State Devices and Circuits	5
ELECT	137	Solid State Devices and Circuits/Lab	4
ELECT	138	Linear Devices and Circuits	5
ELECT	139	Linear Devices and Circuits Lab	4
		Total	**19**

SECOND YEAR
Fourth Quarter

APLED	125	Employment Preparation[1]	3
ELECT	211	Digital Concepts	5
ELECT	212	Digital Concepts Lab	4
ELECT	213	Basic Computer Systems	5
ELECT	214	Basic Computer Systems Lab	4
		Total	**21**

Fifth Quarter

ELECT	221	Communication Fundamentals	5
ELECT	222	Communication Fundamentals Lab	4
ELECT	223	Advanced Computer Systems	5
ELECT	224	Advanced Computer Systems Lab	4
		Total	**18**

Sixth Quarter

ELECT	231	Advanced Communications	5
ELECT	232	Advanced Communications Lab	4
ELECT	233	Systems Troubleshooting	5
ELECT	234	Systems Troubleshooting Lab	4
		Total	**18**

Seventh Quarter

Choose from the options below as available. Frequency of options offered is based on sufficient student interest and staff availability.

Avionics Option

ELECT	245	Principles of Avionics	5
ELECT	246	Principles of Avionics Lab	4
ELECT	247	Avionics Systems	5
ELECT	248	Avionics Systems Lab	4
		Total	**18**

136 credits are required for an A.A.S. degree.

Computer And Data Communications Technician Option

ELECT	255	Digital Data Communications	5
ELECT	256	Digital Data Communications Lab	4
ELECT	257	Wireless Communications	5
ELECT	258	Wireless Communications Lab	4
		Total	**18**

Broadcast And Rf Communications Technician Option

Seventh Quarter

ELECT	278	RF Communications	5
ELECT	279	RF Communications Lab	4
ELECT	294	Microwave, CATV, and Satellite Communications	5
ELECT	295	Microwave, CATV, and Satellite Communications Lab	4
		Total	**18**

Summer Quarter[2]

ELECT	266	Cooperative Education Seminar AND	1
ELECT	267	Cooperative Education Work Experience OR	10
ELECT	288	Cooperative Education Work Experience (No Seminar)	11
		Total	**11**

Electronics Maintenance Technician Option

Sixth Quarter

The student selects 18 credits from electronics, electrical maintenance and automation, hydraulic and pneumatic automation technology or any related course that is approved by the department chair or the technical education division dean.

Seventh Quarter

The student selects 18 credits from electrical maintenance and automation program, hydraulic and pneumatic automation technology or any related course that is approved by the department chair or the technical education division dean.

Biomedical Equipment Technician

This option is a separate degree program that requires the applicant to take the first five quarters of the electronics engineering technician program. Please see the Career Planning Guide for this option.

Electronics Engineering Technician Certificate

First Quarter

ELECT	110	Computer Fundamentals for Electronics	2
ELECT	111	Fundamentals of DC/AC Circuits	7
ELECT	112	DC/AC Circuit Lab	5
ELECT	113	DC/AC Circuit Math	5
		Total	**19**

Second Quarter

APLED	121	Applied Written Communication[1]	4
ELECT	121	Advanced DC/AC Circuits	9
ELECT	122	Advanced DC/AC Circuits Lab	5
ELECT	123	Advanced DC/AC Circuit Math	5
		Total	**23**

Third Quarter

ELECT	134	Printed Circuit Board/Surface Mount Technology Design and Repair	1
ELECT	136	Solid State Devices and Circuits	5
ELECT	137	Solid State Devices and Circuits/Lab	4
ELECT	138	Linear Devices and Circuits	5
ELECT	139	Linear Devices and Circuits Lab	4
		Total	**19**

Fourth Quarter[2]

APLED	125	Employment Preparation[1]	3
ELECT	211	Digital Concepts	5
ELECT	212	Digital Concepts Lab	4
ELECT	213	Basic Computer Systems	5
ELECT	214	Basic Computer Systems Lab	4
		Total	**21**

136 credits are required for the A.A.S. degree and 82 credits are required for a certificate.

[1] *This related education requirement may be met by any course or combination of courses approved by the department chair or the technical education division dean.*

[2] *To earn a certificate from the Society of Broadcast Engineers, students must take these courses during summer quarter prior to or immediately following the seventh quarter.*

EMERGENCY MEDICAL TECHNICIAN (PARAMEDIC)

A.A.S. Degree, Certificate: SCC

This program is for personnel who provide advanced emergency care under a supervising physician through direct radio communication and written standing orders. Applicants must be individuals with at least one year of prior experience as an EMT-Basic or EMT-Intermediate and have completed two quarters of college level anatomy and physiology (HED 108, 109) with a 2.0 grade or better within the last five years prior to acceptance into the program. It is strongly recommend that students complete A-P 242 and 243 prior to entering the Emergency Medical Technician (Paramedic) program. Additional admission requirements are listed on the attached student requirement sheet. Students may complete the 4-quarter certificate requirements in emergency medical technician-paramedic or complete the required certificate courses and the additional arts and sciences course requirements to receive an A.A.S. degree. Students may enroll in arts and sciences either preceding or following the 4-quarter certificate curriculum. A 2.0 grade or better must be maintained in all classes.

Certificate

First Quarter

APLED	112	Applied Mathematics	3
LIFE	131	Advanced Life Support I	14
		Total	**17**

Second Quarter

APLED	123	Leadership Skills for Business and Industry	3
LIFE	132	Advanced Life Support II	15
		Total	**18**

Third Quarter

LIFE	133	Advanced Life Support III	18
		Total	**18**

Fourth Quarter

LIFE	134	Advanced Life Support IV	21
		Total	**21**

For an A.A.S. degree, students must complete 20 credits of the following required courses and 7 credits of department approved electives

numbered 100 or above in addition to the 1-year certificate curriculum (listed above). Students may enroll in arts and sciences courses either preceding or following the 4-quarter certificate curriculum. A 2.0 grade or better must be maintained in all classes.

Required Courses for Optional A.A.S. Degree

Arts and Sciences Curriculum[1]

A-P	242	Human Anatomy and Physiology	5
A-P	243	Human Anatomy and Physiology	5
BIOL	101	General Biology	5
ENG	101	English Composition	5
		Total	**20**

OPTIONAL ELECTIVES TO CONSIDER[1]:

ENG	201	Advanced English Composition	5
		Electives: Computer, Speech, Math/Science, Chemistry	2
		Total	**7**

101 credits are required for an A.A.S. degree and 74 credits are required for a certificate.

[1] *These courses must be completed within a five year period preceding or following the 4-quarter certificate curriculum with a 2.0 grade or better.*

ESTHETICIAN

Certificate: SCC

Students enrolling in the esthetics certificate program will receive training in all phases of skin care. Emphasis will be on the use of facial machines; temporary hair removal; various types of facial treatments; face, neck and hand massage techniques; and all safety and sanitation measures involved with these processes. Upon successful completion of the coursework, the student will be prepared to take the Washington state examination in esthetics.

First Quarter

COS	123	Esthetics Concepts I	4
COS	124	Esthetics Applications I	10
COS	127	Advanced Esthetic Concepts	1
ISFTY	111	Industrial First Aid	2
		Total	**17**

Second Quarter

COS	125	Esthetics Concepts II	4
COS	126	Esthetics Applications II	10
COS	227	Advanced Esthetics Applications	2
		Total	**16**

33 credits are required for a certificate.

FASHION MERCHANDISING

A.A.S. Degree: SFCC

Fashion merchandising is a two-year program designed to prepare both men and women for a career in the retail merchandising field. Professional courses stress the fashion concept as it applies to apparel and nonapparel merchandise, as well as a thorough understanding of buying, promotion and inventory systems.

FIRST YEAR

First Quarter

FMDSE	111	Fashion Merchandising Seminar[1]	1
FMDSE	150	Principles of Retail Merchandising	5
FMDSE	155	Fashion Trends	3
FMDSE	224	Principles of Retail Promotion OR	
MMGT	218	Fundamentals of Advertising	5
MMGT	181	Leadership Training-DEC OR	
		Elective	1
		Total	**15**

Second Quarter

FMDSE	112	Fashion Merchandising Seminar[1]	1
FMDSE	160	Merchandise Presentation	5
FMDSE	152	Professional Development in Business OR	
		Elective	2
FMDSE	180	Retail Sales Techniques	3
MMGT	182	Leadership Training-DEC OR	
		Elective	1
		Required or Elective Courses	3
		Total	**15**

Third Quarter

FMDSE	113	Fashion Merchandising Seminar[1]	1
FMDSE	201	Fashion Fabrics[2]	3
FMDSE	210	Merchandising Management	5
MMGT	183	Leadership Training-DEC	1
		Required or Elective Courses	5
		Total	**15**

SECOND YEAR

Fourth Quarter

		Required or Elective Courses	18
		Total	**18**

Fifth Quarter

		Required or Elective Courses	15
		Total	**15**

Sixth Quarter

		Required or Elective Courses	17
		Total	**17**

REQUIRED COURSES:

BT	107	Business Communications[3]	3
BT	272	Business Correspondence	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
FMDSE	267	Cooperative Education Work Experience[2]	3
GBUS	101	Introduction to Business	5
GBUS	103	Basic Business Math and Electronic Calculators	5
MMGT	211	Marketing	5

In addition to the required courses listed above, 23 elective credits from Group A and B below must be obtained for graduation requirement of 95 credits. Choose a minimum of 15 credits from Group A and 8 credits from Group B. These courses are to be taken throughout the two-year program.

GROUP A-BUSINESS ELECTIVES:

ACCT	101	Principles of Accounting	5
ACCT	102	Principles of Accounting	5
BT	101	Keyboarding	5
CAPPS	102	Introduction to Office	1
CAPPS	110	Word	1
CAPPS	112	Excel	1
CAPPS	114	Access	1
ECON	201	Introduction to Macroeconomics	5
ECON	202	Introduction to Microeconomics	5
GBUS	100	Money Management	3
GBUS	205	Business Law	5
GBUS	217	Business Statistics	5
GBUS	280	Human Relations in Business	5
IS	120	Business Computer Use	3
MMGT	101	Principles of Management	5
MMGT	231	Human Resource Management	5
MMGT	270	Conference Preparation Techniques	1-5
		Merchandising Seminars or other approved business courses	

GROUP B[4]-ELECTIVES:

ART	105	Color and Design	5
FMDSE	161	Merchandise Trends	3

1 *Required of all first-year students.*
2 *Must be taken concurrently with seminar.*
3 *ENG 101 may be substituted for BT 107 and 108.*
4 *Any interior design course. Other home economics and art courses approved by the fashion merchandising coordinator.*

FINANCIAL SERVICES/TELLER

Certificate: SCC

This program prepares students for employment as bank tellers. The program includes a basic introduction to teller qualifications, duties and responsibilities. Also included are money handling, transactions, negotiable instruments, checking and savings systems, bank services, bank security, the use of teller equipment and a variety of functions common to the banking industry. In the second quarter students gain skills in math, 10-key calculators, computer usage and writing. They also may select one elective business class from a list of options.

First Quarter

BT	100	Keyboarding for Computers	1
BANK	101	Introduction to Banking Industry	4
BANK	102	Professional Standards in Banking	1
BANK	103	Introduction to Teller Operations	4
BANK	104	Teller Operations Applications	3
		Total	**13**

Second Quarter

APLED	121	Applied Written Communication[1]	4
CIS	110	Introduction to Computer Applications	5
GBUS	103	Basic Business Math and Electronic Calculators	5
		Business Elective[2]	3-5
		Total	**17-19**

30-32 credits are required for a certificate.

[1] *This course may be substituted with any written communications course or combination of courses approved by the instructional dean.*
[2] *Business elective classes may include the following:*
　GBUS　100　Money Management 3
　GBUS　101　Introduction to Business 5
　GBUS　280　Human Relations in Business 5
Students should confer with their instructors before registering for electives.

Financial Services/Trainee Certificate

This short-term training program introduces students to the basic elements necessary for entry-level employment as a bank teller. Areas of study include lecture and practical applications in money handling transactions, negotiable instruments, checking and savings systems, bank services, bank security, the use of teller equipment and a variety of functions common to the banking industry.

First Quarter

BT	100	Keyboarding for Computers	1
BANK	101	Introduction to Banking Industry	4
BANK	102	Professional Standards in Banking	1
BANK	103	Introduction to Teller Operations	4
BANK	104	Teller Operations Applications	3
		Total	**13**

13 credits are required for a certificate.

FIRE OFFICER

A.A.S. Degree: SCC

The fire officer program is designed to enhance the technical and general education of the volunteer and career firefighter. The program builds on the basic fire service information which allows the firefighter to gain the knowledge and understanding of information required for work at the officer level within the fire service. Students are given a good educational foundation which is coupled with a broad spectrum of technical information that will help them perform the duties of a fire officer within their jurisdiction. The degree is targeted to current firefighters or fire officers.

FIRST YEAR

CIS	110	Introduction to Computer Applications	5
CHEM	100	Survey of Chemistry	5
ENG	101	English Composition	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
ENG	201	Advanced English Composition	5

MATH	201	Introduction to Finite Mathematics	5
PHYS	100	Introductory Physics	5
PSYCH	101	Introduction to Psychology	5
SOC	101	Introduction to Sociology	5
SPCH	220	Intercultural Communication	5
		Total	**50**

SECOND YEAR

FOD	101	Fire Officer IA	3
FOD	103	Fire Officer IB	3
FOD	110	Fire Service Leadership	3
FOD	131	Fire Service Instructor I	3
FOD	133	Fire Service Instructor II	3
FOD	140	Fire Service Incident Safety Officer	2
FOD	201	Fire Officer IIA	3
FOD	203	Fire Officer IIB	3
FOD	210	Incident Management-Multi-Company Operations	3
		Electives[1]	6-7
		Total	**32-33**

WORK BASED LEARNING COURSES:

FOD	102	Fire Officer IA Work Based Learning	3
FOD	104	Fire Officer IB Work Based Learning	3
FOD	132	Fire Service Instructor II Work Based Learning	3
FOD	202	Fire Officer IIA Work Based Learning	3
FOD	204	Fire Officer IIB Work Based Learning	3
		Total	**15**

97-98 credits are required for an A.A.S. degree.

[1] *Elective Credits:*
　FOD　205　Fire Investigation 3
　FOD　206　Fire Inspection and Codes 4

FIRE SCIENCE TECHNOLOGY

A.A.S. Degree: SCC

The fire science technology program is designed to prepare students for entry-level careers as firefighters for municipal, industrial state and federal fire departments. The primary mission of the fire science technology program is identification and mitigation of emergencies in order to preserve life and property. Upon completion of the program, students are required to attend EMT training by the third quarter of the program. They are then eligible for a firefighter certification.

FIRST YEAR

First Quarter

FS	100	Orientation to Fire Science[1,2]	2
FS	211	Introduction to Fire Science	4
FS	212	Fire Science Applications I	6
FS	152	Building Construction	3
		PE Elective[7]	1
		Total	**16**

Second Quarter

FS	221	Intermediate Fire Science	4
FS	222	Fire Science Applications II	6
FS	170	Hazardous Materials I	3
		PE Elective[7]	1
		Total	**14**

Third Quarter

FS	177	Wildland Fire Operations[4]	3
FS	160	Fire Tactics	3
FS	231	Advanced Fire Science	4
FS	232	Fire Science Applications III	6
		PE Elective[7]	1
		Total	**17**

SECOND YEAR

Fourth Quarter

CIS	110	Introduction to Computer Applications	5
ENG	101	English Composition	5
FS	105	Principles of Hydraulics	4
		Math[6]	5
		PE Elective[7]	1
		Total	**20**

Fifth Quarter

CHEM	100	Survey of Chemistry	5
ENG	109	Speech Composition[5] AND	
SPCH	101	Introduction to Speech Communications	5
FS	220	Fire Protection Systems	2
FS	233	Professional Development	2
		PE Elective[7]	1
		Total	**15**

Sixth Quarter

ENG	201	Advanced English Composition	5
FS	266	Cooperative Education Seminar AND	1
FS	267	Cooperative Education Work Experience OR	2
FS	288	Cooperative Education Work Experience (No Seminar)[3]	3
PHYS	100	Introductory Physics	5
SPCH	220	Intercultural Communication	5
		PE Elective[7]	1
		Total	**19**

101 credits are required for the A.A.S. degree.

A 2.0 grade or better must be maintained in all courses required for a degree.

EMT is a condition of graduation and must be obtained by the third quarter.

[1] First year pre-entry fire science students only.

[2] This course is offered in fall quarter only.

[3] This course is offered in winter quarter only.

[4] This course is offered in spring quarter only.

[5] This course may be substituted with any related course "combination of related courses approved by the instructional dean".

[6] This math course requirement may be met by any transferable college level math course.

[7] List of approved P.E. courses: AQUAT 136, CJ 131, 132, 133, 241, 242, 243, PE 106, 117, 139, 185, 186, 187, 206, 217, 239, 285, 286, 287.

FRONT OFFICE PROFESSIONAL

Certificate: SCC

The front office professional program is a three-quarter program preparing students for entry-level positions. Students completing this program are prepared to greet callers, make and receive telephone calls in a professional way, format correspondence and reports, and perform a variety of duties depending on the office situations.

First Quarter

BT	090	Basic Grammar for Business II	5
BT	101	Keyboarding	5
BT	151	Business Student Preparation	5
		Total	**15**

Second Quarter

BT	102	Document Processing[1]	5
BT	109	Business Communications	5
CATT	102	Introduction to Outlook	2.5
GBUS	103	Basic Business Math and Electronic Calculators	5
		Total	**17.5**

Third Quarter[2]

BT	160	Job Preparation Techniques	3
BT	165	Word Processing	5
BT	231	Office Procedures	5
MMGT	223	Customer Service	3
		Total	**16**

48.5 credits are required for the certificate.

[1] Keyboarding proficiency of 30 wpm for three minutes with no more than six errors is a prerequisite for BT 102.

[2] To enter the third quarter of this program, students must pass competency tests in the following areas:
- Math (fractions, percentages, etc.)
- Writing (write a basic letter, memo, and/or e-mail with correct spelling, punctuation, grammar, etc.)
- Format documents from unarranged copy in a timed situation (letters, memos, reports, tables) using Word
- Keyboarding proficiency of 40 wpm

GERONTOLOGY PARAPROFESSIONAL

A.A.S. Degree, Certificate: SFCC

Spokane Falls Community College offers a program designed to provide specific training to individuals who wish to establish a career in meeting the needs of a rapidly expanding older population. The gerontology program examines mental, emotional, physical and social changes, which confront older adults. Gerontology is distinct from geriatrics, a medical specialty that explores health and disease in elders. Some of the current career fields may include program management, administration, recreation services, residential care, business and education fields and human service programs related to life after sixty.

An A.A.S. degree and a certificate option are available. The associate in applied science degree prepares students for employment. The one-year certificate program is an option for those who have another degree and wish to increase their gerontology skills. Education in gerontology may be used as a support base for many helping professions. This area of study is also a resource for launching second and third careers.

FIRST YEAR

First Quarter

HS	102	Introduction to Human Services	5
HS	136	Improving Interpersonal Communication	5
HSSUB	131	Survey of Chemical Dependency	3
		Elective[1]	5
		Total	**18**

Second Quarter

HS	105	Child Abuse	5
HSGER	101	Introduction to Social Gerontology	5
HSGER	250	Death, Loss and Grief	5
		Total	**15**

Third Quarter

ENG	101	English Composition	5
HS	115	Social Policy OR	
HSSOC	115	Social Policy OR	
HSSOC	221	Treatment Theories in Human Services	5
HSGER	115	Multi-Cultural Perspectives in Human Services OR	
HSGER	201	Aging and Personality	5
		Total	**15**

SECOND YEAR

Fourth Quarter

GBUS	102	Math Skills for Business[2] OR	
		Other Math	3-5
HSGER	110	Leisure, Learning and Living	5
HSGER	281	Practicum I	5
		Total	**13-15**

Fifth Quarter

HSGER	210	Aging and Mental Health	5
HSGER	282	Practicum II	5
		Elective[1]	5
		Total	**15**

Sixth Quarter

HSGER	283	Practicum III	5
		Elective[1]	5
		Elective[1]	5
		Total	**15**

Certificate

Students working toward a certificate of completion in gerontology must choose and complete a specified 30 credit sequence of courses and 10 credits of practicum in the gerontology program, consulting individually with a gerontology instructor before planning the total program.

ENG	101	English Composition	5
GBUS	102	Math Skills for Business	3
HS	136	Improving Interpersonal Communication	5
HSGER	101	Introduction to Social Gerontology	5
HSGER	110	Leisure, Learning, and Living	5
HSGER	115	Multi-Cultural Perspectives in Human Services	5
HSGER	201	Aging and Personality	5
HSGER	250	Death, Loss and Grief	5
HSGER	281	Practicum I	5
HSGER	282	Practicum II	5
		Total	**48**

91-93 credits are required for an A.A.S. degree and 48 credits are required for a certificate.

[1] *Electives to be selected with the approval of a gerontology instructor.*

[2] *Concurrent with SPCH 121 Job Communication Skills from recommended electives*

GRAPHIC DESIGN

A.A.S. Degree, Certificate: SFCC

The two-year graphic design program is an intensive course of study that prepares students for entry-level jobs in design studios, advertising agencies, corporate in-house design departments and other businesses which use computers to create design, advertising and promotional pieces. Standards match job requirements that range from technical production abilities to high-level creative conceptualizing. The program consists of a project-oriented curriculum that incorporates industry design problems and projects to demonstrate student learning. Courses in design process and design technology interact to deliver the skills necessary to successfully complete specific design projects. Students assemble project portfolios that are reviewed by the design faculty.

With strong guidance from a local advisory committee of professional designers, the program is constantly updated with the goal of placing students in entry-level design jobs. Throughout the program there is ample opportunity for students to interact with professionals via field trips, guest lecturers, adjunct faculty and the Internet. At the end of the second year there is portfolio organization, internships, resume preparation and job-placement assistance. Although the graphic design program is oriented to the print medium, students are introduced to web design and multi-media design.

FIRST YEAR

First Quarter

GRDSN	101	Design Process I	2
GRDSN	102	Design Technology I	2
GRDSN	103	Design Projects I	1
GRDSN	104	Design Lab I	2
GRDSN	105	Drawing for Graphic Designers	2
GRDSN	109	History of Design	4
GRDSN	156	Illustrator I	2
GRDSN	163	InDesign I	2
		Total	**17**

Second Quarter

ART	105	Color and Design	5
GRDSN	111	Design Process II	2
GRDSN	112	Design Technology II	2
GRDSN	113	Design Projects II	1
GRDSN	114	Design Lab II	2
GRDSN	115	Drawing for Communication	2
GRDSN	158	PhotoShop I	2
GRDSN	172	Dreamweaver	2
		Total	**18**

Third Quarter

ENG	105	Pro/Tech: Basic Writing	5
GBUS	102	Math Skills for Business	3
GRDSN	121	Design Process III	2
GRDSN	122	Design Technology III	2
GRDSN	123	Design Projects III	1
GRDSN	124	Design Lab III	2
GRDSN	125	Computer Drawing	2
		Total	**17**

SECOND YEAR

Fourth Quarter

GENST	109	Applied Critical Thinking	3
GRDSN	126	Web Production	2
GRDSN	142	Print Production	2
GRDSN	201	Design Process IV	2
GRDSN	202	Design Technology IV	2
GRDSN	203	Design Projects IV	1
GRDSN	204	Design Lab IV	4
		Electives[1]	3
		Total	**19**

Fifth Quarter

GRDSN	211	Design Process V	2
GRDSN	212	Design Technology V	2
GRDSN	213	Design Projects V	1
GRDSN	214	Design Lab V	4
GRDSN	235	Multimedia Technology I	3
HS	136	Improving Interpersonal Communication	5
		Total	**17**

Sixth Quarter

GRDSN	221	Design Process VI	2
GRDSN	223	Design Projects VI	1
GRDSN	224	Design Lab VI	4
GRDSN	266	Cooperative Education Seminar	1
GRDSN	267	Cooperative Education Work Experience	3-5
		Electives[1]	3-5
		Total	**14-18**

102-106 credits are required for an A.A.S. degree.

[1] *See department for listing of approved electives.*

3-D Animation Certificate

This certificate is designed as an introduction to 3-D animation technologies and projects. The courses provide students with fundamental skills as they relate to 3-D animation. Students are assigned industry related projects and exercises.

ART	106	3-D Design	4
GRDSN	238	3-D Modeling and Animation I	3
GRDSN	239	3-D Modeling and Animation II	3
GRDSN	240	3-D Modeling and Animation III	3
PHOTO	126	Digital Photography I	5
		Total	**18**

Multimedia Certificate

This certificate is designed as an introduction to Multimedia technologies and projects. The courses provide students with fundamental skills as they relate to multimedia and animation. Students are assigned industry related projects and exercises.

GRDSN	160	Director	2
GRDSN	171	Flash	2
GRDSN	235	Multimedia Technology I	3
GRDSN	236	Multimedia Technology II	3
GRDSN	238	3-D Modeling and Animation I	3
GRDSN	239	3-D Modeling and Animation II	3
		Total	**16**

Web Design Certificate

This certificate is designed as an introduction to Web Design technologies and projects. The courses provide students with fundamental skills as they relate to web design. Students are assigned industry related projects and exercises.

GRDSN	126	Web Production	2
GRDSN	158	PhotoShop I	2

GRDSN	167	Fireworks	2
GRDSN	172	Dreamweaver	2
GRDSN	235	Multimedia Technology I	3
GRDSN	236	Multimedia Technology II	3
IS	126	Internet Publishing	2
		Total	**16**

Graphic Design Survey Certificate

This certificate is designed as an introduction to Graphic Design technologies and projects. The courses provide students with fundamental skills as they relate to graphic design and advertising. Students are assigned industry related projects and exercises.

GRDSN	101	Design Process I	2
GRDSN	102	Design Technology I	2
GRDSN	104	Design Lab I	2
GRDSN	105	Drawing for Graphic Designers	2
GRDSN	109	History of Design	4
		Electives	2
		Total	**14**

HEALTH/FITNESS TECHNICIAN

A.A.S. Degree: SFCC

The health/fitness technician program is a two-year professional technical curriculum offered at Spokane Falls Community College. This program is designed for students who are looking toward a career in the health/fitness industry. Students who complete the two-year program and receive an associate in applied science degree (A.A.S.) can enter the job market immediately. Students interested in transferring to a four-year college can utilize an articulation agreement with Eastern Washington University. This agreement allows students the option of transferring directly into the exercise science program at EWU.

Certification for fitness professionals, with its emphasis on safety, reliability and high standards, is required in most fitness facilities. The HFT program prepares students for the National Strength and Conditioning Association's personal trainer exam. The NSCA-CPT exam is the only accredited personal trainer exam in the nation. Spokane Falls Community College is a host site for this national exam in June and December each year.

The HFT program provides instruction in professional areas such as exercise physiology, anatomical kinesiology, sports nutrition, care and prevention of injuries, functional training, personal training, health screening, and exercise prescription. Related courses include stress management, therapeutic massage, first aid/ CPR and exercise for older adults.

Students interested in athletic training can work with experienced college trainers. Students can gain valuable experience working with a wide variety of sports and athletes.

FIRST YEAR

First Quarter

FMT	204	Health Appraisal and Exercise Prescription	5
FMT	230	Therapeutic Massage	3
GBUS	102	Math Skills for Business	3
HLTH	174	First Aid	3
		Total	**14**

Second Quarter

BIOL	101	General Biology	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
FMT	106	Anatomical and Physiological Kinesiology	5
		Total	**15**

Third Quarter

A-P	242	Human Anatomy and Physiology	5
FMT	111	Physiology of Exercise	5
FMT	115	Leadership Dynamics	3
		Elective	3
		Total	**16**

SECOND YEAR

Fourth Quarter

A-P	243	Human Anatomy and Physiology	5
FMT	119	Principles of Strength Training	3
FMT	219	Injury Prevention and Rehabilitation	5
PE	187	Cross Training	2
		Total	**15**

Fifth Quarter

ENG	101	English Composition	5
FMT	209	Exercise and the Cardiovascular System	5
HLTH	104	Stress Management	3
PE	270	Nutrition for Fitness	3
		Total	**16**

Sixth Quarter

FMT	112	Exercise and Aging	3
FMT	225	Personal Training	3
PE	266	Cooperative Education Seminar	1
PE	267	Cooperative Education Work Experience	2
		Elective	5
		Total	**14**

90 credits are required for an A.A.S. degree.

HEALTH INFORMATION TECHNOLOGY

A.A.S. Degree: SCC

This A.A.S. degree program is accredited by the American Health Information Management Association (AHIMA) and the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) and prepares students for employment in maintaining and processing health information in hospitals, nursing facilities, ambulatory care clinics and health insurance agencies. Training in a realistic work environment include managing computer databases, coding and abstracting clinical data, quality control management of information, health-related legal principles and policies, and knowledge of the Health Insurance Portability and Accountability Act (HIPAA) regulations. Upon completion of the program, students are eligible to take the Registered Health Information Technician (RHIT) certification exam offered by (AHIMA).

Prerequisite/Admission Requirements:

- High school diploma or GED certificate
- Physical examination
- Keyboarding skills (Microsoft or basic computing)
- Appropriate scores in one of the following: ASSET or Compass

FIRST YEAR

First Quarter

HED	108	Human Anatomy	5
HIT	104	Introduction to Health Information	3
HIT	125	Medical Terminology	5
HIT	160	Computer Theory in Health Information	3
		Total	**16**

Second Quarter

GBUS	103	Basic Business Math and Electronic Calculators	5
HED	109	Human Physiology and Disease	5
HIT	101	Health Record Systems	5
HIT	161	Health Management Information Systems	3
		Total	**18**

Third Quarter

ENG	120	Applied Technical Writing for Vocations OR	
ENG	205	Technical Writing	5
HIT	129	Pathophysiology	5
HIT	135	Comparative Record Systems	4
HIT	162	Electronic Health Record Systems	3
		Total	**17**

SECOND YEAR

Fourth Quarter

HIT	105	Legal Concepts in Health	3

HIT	145	Pharmacology	3
HIT	203	Clinical Practice	1
HIT	209	Health Data Analysis and Display	5
HIT	212	Acute Care Coding	5
		Total	**17**

Fifth Quarter

HIT	208	Health Information Management	5
HIT	211	Quality Improvement	4
HIT	214	Ambulatory Care Coding	5
HIT	250	Management and Supervision in Health Organizations	3
		Total	**17**

Sixth Quarter

HIT	213	Clinical Practice	8
HIT	216	Reimbursement Strategies for HIM Professionals	5
HIT	218	Advanced Medical Coding	5
HIT	240	HIT Clinical Seminar	2
		Total	**20**

105 credits are required for an A.A.S. degree.

- Each required course for graduation in the first year of the curriculum must be completed with a 2.0 grade or better before proceeding to the second year of the curriculum.

- Students desiring a course of study leading to an associate of arts degree should consult the college catalog for the specific degree requirements. The A.A. degree is recommended for students who may consider continuing their education in health information management or administration.

- 2.0 grade or better must be maintained in all courses required for a degree.

- All HIT courses must be completed within five years.

HEALTH RECORD CLERK

A.A.S. Degree, Certificate: SCC

The health record clerk program offers versatility in skills development and career mobility for the student. Health record clerks provide services in hospitals, long-term care, ambulatory care, clinics and other health-related areas. Students have clinical practice experience in an Admissions/Registration Department, Health Information Management Department or alternative sites to practice and integrate their learned skills.

Prerequisite/Admission Requirements:

- High school diploma or GED certificate

- Physical exam

- Keyboarding skills

- Appropriate scores in one of the following: ASSET or Compass

First Quarter

HIT	160	Computer Theory in Health Information	3
HRC	104	Introduction to Health Information	3
HRC	108	Human Anatomy	5
SPCH	102	Interpersonal Communication	5
		Total	**16**

Second Quarter

GBUS	103	Basic Business Math and Electronic Calculators	5
HIT	161	Health Management Information Systems	3
HRC	101	Health Record Systems	5
HRC	125	Medical Terminology	5
		Total	**18**

Third Quarter

HIT	162	Electronic Health Record Systems	3
HRC	105	Legal Concepts in Health	3
HRC	126	Introduction to Study of Disease	3
HRC	135	Comparative Record Systems OR	
HRC	145	Pharmacology	3-4
HRC	150	Health Record Clerk Directed Practice	3
		Total	**15-16**

49-50 credits are required for a certificate.

Liberal Arts Curriculum (OPTIONAL A.A.S. DEGREE)

ENG	101	English Composition	5
MATH	100	Vocational Technical Mathematics	5
PSYCH	101	Introduction to Psychology	5
		Electives	27
		Total	**42**

OPTIONAL ELECTIVES TO CONSIDER:

ENG	201	Advanced English Composition	5
GBUS	101	Introduction to Business	5
MMGT	101	Principles of Management	5
SOC	211	Marriage and the Family	5
ISFTY	111	Industrial First Aid	2
		Computer Classes	5

91 credits are required for an AAS degree.

- Each required course in the first and second quarter must be completed with a 2.0 grade or better before proceeding to the third quarter. A 2.0 GPA or better is needed in all required courses before a certificate is awarded.

- All courses must be completed within a five-year period.

- Any exceptions to the admission requirements must be approved by the program director and the dean of instruction for Health and Environmental Sciences.

- The student may complete requirements in health record clerk and receive a certificate or complete the professional requirements plus liberal arts requirements and receive an associate in applied science degree.

- The student may enroll in liberal arts either preceding or following the professional curriculum. Students enrolling in liberal arts the first year must make formal application to the health record clerk program during the first year.

- For an associate in applied science degree, the student must complete 15 credit hours of required courses and 27 hours of department approved electives numbered 100 or above in addition to the one-year professional curriculum, and a 2.0 GPA must be maintained in all classes.

HEALTH UNIT COORDINATOR

A.A.S. Degree, Certificate: SCC

This program offers a one-year certificate with an optional A.A.S. degree and prepares students for a profession working a hospital or long-term care facility. Students learn to coordinate between physicians, patients and hospital staff, utilize and maintain computer record systems, and manage communications within a healthcare unit. Upon completion of the program, students are eligible to take the national Certified Health Unit Coordinator (CHUC) certification exam offered by the National Association of Health Unit Coordinators (NAHUC).

Prerequisite/Admission Requirements:

- High school diploma or GED certificate

- Physical exam

- Ability to perform under stress

- Keyboarding skills (Microsoft or basic computing)

- Appropriate scores in one of the following: ASSET or Compass

Any exceptions to the admission requirements must be approved by the program director and the dean of instruction for Health and Environmental Sciences.

Certificate (PROFESSIONAL REQUIREMENTS)

First Quarter

APLED	123	Leadership Skills for Business and Industry	3
GBUS	103	Basic Business Math and Electronic Calculators	5
HIT	160	Computer Theory in Health Information	3
HUC	104	Introduction to Health Information	3
HUC	108	Human Anatomy	5
		Total	**19**

Second Quarter

HED	132	Ethics and Professionalism in Health.	2
HIT	161	Health Management Information Systems	3
HUC	101	Health Record Systems	5
HUC	120	Introduction to Health Unit Coordinator Procedures.	2
HUC	125	Medical Terminology	5
		Total	**17**

Third Quarter

HIT	162	Electronic Health Record Systems	3
HUC	105	Legal Concepts in Health	3
HUC	126	Introduction to Study of Disease	3
HUC	127	Health Unit Coordinator Procedures	5
HUC	145	Pharmacology.	3
HUC	152	Unit Coordinator Practicum	3
		Total	**20**

56 credits are required for a certificate.

Liberal Arts Curriculum (OPTIONAL A.A.S. DEGREE)
REQUIRED COURSES:

ENG	101	English Composition	5
GBUS	101	Introduction to Business	5
PSYCH	101	Introduction to Psychology	5
SOC	101	Introduction to Sociology OR	
SOC	211	Marriage and the Family	5

OPTIONAL ELECTIVES TO CONSIDER[1]:

ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
GBUS	280	Human Relations in Business	5
HUC	266	Cooperative Education Seminar	1-2
HUC	267	Cooperative Education Work Experience	1-18
MMGT	101	Principles of Management	5
SPCH	220	Intercultural Communication	5

101 credits are required for an A.A.S. degree.

- Each required course in the first and second quarter must be completed with a 2.0 grade or better before proceeding to the third quarter. A 2.0 grade or better is needed in all required courses before a certificate is awarded.

- The student may complete requirements in health unit coordinator and receive a certificate or complete the professional requirements plus liberal arts requirements and receive an associate in applied science degree.

- The student may enroll in liberal arts either preceding or following the professional curriculum. Students enrolling in liberal arts the first year must make formal application to the health unit coordinator program during the first year.

- All professional coursework must be completed within a five-year period. Students must maintain a 2.0 grade or better in each of the courses.

- For an associate in applied science degree, the student must complete 20 credit hours of required courses and 25 credit hours of department approved electives numbered 100 or above in addition to the one-year professional curriculum, and a 2.0 GPA must be maintained in all classes.

[1] *Or any departmentally approved elective numbered 100 or above.*

HEARING INSTRUMENT SPECIALIST

A.A.S. Degree, Certificate: SFCC

Spokane Falls Community College offers a two-year program to prepare hearing instrument specialists for immediate employment in hearing health care establishments. The program includes study in physiology and anatomy, social science and technical hearing instrument courses. The Hearing Instrument Specialist program is primarily an online low residency program, meaning students complete coursework online with occasional meetings on-campus to verify skills and competencies. Students who reside in Spokane have weekly on-campus labs. Students who live outside of the Spokane area work with mentors who are licensed hearing instrument dispensers. These mentors assist the students in weekly lab activities. Close communication between the mentor, student and faculty is important in order for a student to succeed in this challenging program.

Hearing instrument specialists find a variety of professional experiences available to them, including independent contracted employment, professional consulting, establishment ownership and technical support of related professions. After successful completion of the program, all educational requirements of the state (Washington State Department of Health) will have been satisfied, pursuant to state licensing as a duly authorized "Hearing Instrument Fitter/Dispenser."

FIRST YEAR

First Quarter

ENG	101	English Composition	5
HIS	101	Basic Hearing Instrument Sciences	4
HIS	104	Hearing Physiology and Anatomy	4
HIS	106	Healthcare and Business Ethics	4
		Total	**17**

Second Quarter

GBUS	103	Basic Business Math and Electronic Calculators OR	
MATH	100	Vocational Technical Mathematics OR	
MATH	115	Math for the Liberal Arts	5
HIS	123	Basic Audiometrics	4
HIS	125	Auditory Disorders	4
HIS	127	Hearing Healthcare Management I	4
		Total	**17**

Third Quarter

HIS	134	Advanced Audiometrics	4
HIS	136	Hearing Instrument Technologies	4
HIS	138	Earmolds and ALDS	4
HS	136	Improving Interpersonal Communication OR	
GBUS	280	Human Relations in Business	5
		Total	**17**

SECOND YEAR

Fourth Quarter

GENST	109	Applied Critical Thinking	3
HIS	201	Hearing Healthcare Management II	4
HIS	206	Hearing Instrument Specialist Laboratory I	3
HIS	250	Perspectives on Disabilities	4
		Total	**14**

Fifth Quarter

HIS	210	Clinical Methods I	5
HIS	213	Marketing/Sales	4
HIS	215	Hearing Instrument Specialist Laboratory II	5
		Total	**14**

Sixth Quarter

HIS	205	Introduction to Speech-Language Pathology and Audiology	4
HIS	222	Clinical Methods II	6
HIS	266	Cooperative Education Seminar	1
HIS	267	Cooperative Education Work Experience	5
		Total	**16**

95 credits are required for an A.A.S. degree.

Certificate

To provide the basic education necessary to provide professional assistance to hearing instrument dispensing offices.

First Quarter

HIS	101	Basic Hearing Instrument Sciences	4
HIS	104	Hearing Physiology and Anatomy	4
HIS	106	Healthcare and Business Ethics	4
		Total	**12**

Second Quarter

HIS	123	Basic Audiometrics	4
HIS	125	Auditory Disorders	4
HIS	127	Hearing Healthcare Management I	4
HIS	213	Marketing/Sales	4
		Total	**16**

Third Quarter

HIS	134	Advanced Audiometrics	4
HIS	138	Earmolds and ALDS	4
HIS	266	Cooperative Education Seminar	1
HIS	267	Cooperative Education Work Experience	5
		Total	**14**

42 credits are required for a certificate.

HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION

A.A.S. Degree: SCC

Completion of the two-year heating, ventilation, air conditioning and refrigeration (HVAC) program at Spokane Community College prepares the student for an entry-level position in one of the most challenging occupations available.

Entry-level HVAC technicians typically work on residential and light commercial systems performing equipment installations, preventative maintenance, and service and repair functions. Opportunities also are available in systems design and sales.

Areas of study include basic HVAC systems, electricity, heating, local gas and oil codes, load calculations, cooling, refrigeration, duct design, and troubleshooting. These skills are taught from lab applications coordinated with classroom theory and actual jobsite experience.

FIRST YEAR

First Quarter

AIRC	113	Math for HVAC Technicians	5
AIRC	114	Principles of Electricity	8
AIRC	117	Theory of Heat Transfer	4
		Total	**17**

Second Quarter

AIRC	115	HVAC Electrical Applications	7
AIRC	128	Fundamentals of Heating and Mechanical Systems	8
APLED	121	Applied Written Communication	4
APLED	125	Employment Preparation	3
		Total	**22**

Third Quarter

AIRC	137	Heating Systems Servicing and Troubleshooting	7
AIRC	201	Refrigeration Fundamentals	8
ISFTY	111	Industrial First Aid	2
		Total	**17**

Fourth Quarter[1]

AIRC	202	Thermodynamics of Refrigeration	8
AIRC	263	System Servicing and Troubleshooting of Air Conditioners	7
		Total	**15**

SECOND YEAR

Fifth Quarter

AIRC	125	Sheet Metal Layout and Fabrication	5
AIRC	246	HVAC Load Calculations	4
AIRC	247	Oil Heating Systems	4
AIRC	249	Hydronic Heating Systems	7
		Total	**20**

Sixth Quarter

AIRC	255	Installation Practices	7
AIRC	264	System Servicing and Troubleshooting of Heat Pumps	7
		Total	**14**

Seventh Quarter

AIRC	262	Control Theory and Automation	7
AIRC	265	Direct Digital Control Systems	8
		Total	**15**

120 credits are required for an A.A.S. degree.

[1] *The fourth quarter is held in the summer.*

HORTICULTURE

A.A.S. Degree, Certificate: SCC

FLORIST

The field of environmental horticulture pertains to floriculture, landscape design and maintenance, and greenhouse and nursery management. This program provides a study of ornamental plant materials, plant propagation and retail sales of cut flowers and potted plants. At the completion of the second year, the student may receive the associate in applied science degree. The floral certificate provides a study of floral arrangement techniques and retail sales methods of cut flowers and potted plants. Students must enter in the fall quarter in order to finish the 3-quarter sequence of floral design classes. Employment potential includes floral designer, greenhouse manager, retail sales manager, etc.

FIRST YEAR

First Quarter[1]

AGHRT	103	Introduction to Greenhouse and Nursery Management	3
AGHRT	126	Computer Essentials in Environmental Sciences	2
AGHRT	171	Agricultural Leadership Training	1
AGHRT	211	Floral Design Techniques	5
APLED	112	Applied Mathematics[2]	3
		Total	**14**

Second Quarter[3]

AGHRT	105	Horticultural Retail Sales	3
AGHRT	111	House Plants	5
AGHRT	116	Green Industry Management	5
AGHRT	212	Floral Design Applications	5
		Total	**18**

Third Quarter[4]

AGGEN	151	Agriculture Shop Skills	4
AGHRT	173	Agricultural Leadership Training	1
AGHRT	213	Retail Floristry	5
APLED	121	Applied Written Communication[2]	4
		Total	**14**

SECOND YEAR

Fourth Quarter[1]

AGHRT	104	Principles of Pest Management	5
AGHRT	106	Greenhouse and Nursery Management I	5
ENVSC	110	Plant Biology	5
		Total	**15**

Fifth Quarter[3]

AGHRT	107	Greenhouse and Nursery Management II	4
AGHRT	240	Practicum — Floral Design Projects 1	3
GBUS	280	Human Relations in Business	5
MMGT	205	Small Business Planning	5
		Total	**17**

Sixth Quarter[4]

AGHRT	108	Greenhouse and Nursery Management III	4
AGHRT	230	Plant Problem Diagnosis	5
AGHRT	232	Pest Management Project	2
AGHRT	241	Practicum — Floral Design Projects 2	3
ENVSC	210	Environmental Soil Science	5
		Total	**19**
AGHRT	195	Practicum[5]	3
		Total	**3**

Certificate

The floral certificate provides a study of floral arrangement techniques and retail sales methods of cut flowers and potted plants. Students must enter in the fall quarter in order to finish three quarters.

First Quarter[1]

AGHRT	103	Introduction to Greenhouse and Nursery Management	3
AGHRT	126	Computer Essentials for Environmental Sciences	2
AGHRT	171	Agricultural Leadership Training	1
AGHRT	211	Floral Design Techniques	5
APLED	112	Applied Mathematics[2]	3
		Total	**14**

Second Quarter³

AGHRT 105 Horticultural Retail Sales 3
AGHRT 111 House Plants 5
AGHRT 116 Green Industry Management 5
AGHRT 212 Floral Design Applications 5
 Total 18

Third Quarter⁴

AGGEN 151 Agriculture Shop Skills 4
AGHRT 173 Agricultural Leadership Training 1
AGHRT 213 Retail Floristry 5
APLED 121 Applied Written Communication¹ 4
 Total 14

100 credits are required for an A.A.S. degree and 46 credits are required for a certificate.

¹ *These courses may be offered fall quarter only.*
² *This related education requirement may be met by any course or combination of courses approved by the instructional dean.*
³ *These courses may be offered winter quarter only.*
⁴ *These courses may be offered spring quarter only.*
⁵ *Practicum may be taken at any time during the second year.*

HORTICULTURE

A.A.S. Degree, Certificate: SCC

GREENHOUSE NURSERY

The field of environmental horticulture pertains to floriculture, landscape design and maintenance, and greenhouse and nursery management. This program provides a study of ornamental plant materials, plant propagation, and nursery and greenhouse management methods. Employment potential includes greenhouse manager, nursery manager, retail sales manager and plant propagator.

At the completion of the second year, the student may receive the associate in applied science degree.

FIRST YEAR

First Quarter¹

AGHRT 103 Introduction to Greenhouse and Nursery Management . 3
AGHRT 110 Fall Landscape Plant Materials 5
AGHRT 126 Computer Essentials for Environmental Sciences 2
AGHRT 171 Agricultural Leadership Training 1
AGHRT 211 Floral Design Techniques 5
APLED 112 Applied Mathematics² 3
 Total 19

Second Quarter³

AGHRT 111 House Plants 5
AGHRT 116 Green Industry Management 5
APLED 121 Applied Written Communication² 4
ENVSC 110 Plant Biology 5
 Total 19

Third Quarter⁴

AGHRT 104 Principles of Pest Management 5
AGHRT 105 Horticultural Retail Sales 3
AGHRT 112 Spring Landscape Plant Materials 5
AGHRT 173 Agricultural Leadership Training 1
ENVSC 210 Environmental Soil Science 5
 Total 19

SECOND YEAR

Fourth Quarter¹

AGGEN 151 Agriculture Shop Skills 4
AGHRT 106 Greenhouse and Nursery Management I 5
AGHRT 202 Principles of Irrigation 5
AGHRT 230 Plant Problem Diagnosis 5
AGHRT 232 Pest Management Project 2
 Total 21

Fifth Quarter³

AGHRT 102 Pesticides and Application Equipment 5
AGHRT 107 Greenhouse and Nursery Management II 4
AGHRT 205 Landscape Design 4
AGHRT 219 Soil Management and Fertility 5
 Total 18

Sixth Quarter⁴

AGHRT 108 Greenhouse and Nursery Management III 4
GBUS 280 Human Relations in Business 5
MMGT 205 Small Business Planning 5
 Total 14

AGHRT 195 Practicum⁵ 3
 Total 3

Certificate

First Quarter¹

AGHRT 103 Introduction to Greenhouse and Nursery Management . 3
AGHRT 110 Fall Landscape Plant Materials 5
AGHRT 126 Computer Essentials for Environmental Sciences 2
AGHRT 171 Agricultural Leadership Training 1
AGHRT 211 Floral Design Techniques 5
APLED 112 Applied Mathematics² 3
 Total 19

Second Quarter³

AGHRT 111 House Plants 5
AGHRT 116 Green Industry Management 5
APLED 121 Applied Written Communication² 4
ENVSC 110 Plant Biology 5
 Total 19

Third Quarter⁴

AGHRT 104 Principles of Pest Management 5
AGHRT 105 Horticultural Retail Sales 3
AGHRT 112 Spring Landscape Plant Materials 5
AGHRT 173 Agricultural Leadership Training 1
ENVSC 210 Environmental Soil Science 5
 Total 19

113 credits are required for an A.A.S. degree and 57 credits are required for the certificate.

¹ *These courses may be taken in fall quarter only.*
² *This related education requirement may be met by any course or combination of courses approved by the instructional dean.*
³ *These courses may be taken in winter quarter only.*
⁴ *These courses may be taken in spring quarter only.*
⁵ *Practicum may be taken at any time during the second year.*

HORTICULTURE

A.A.S. Degree, Certificate: SCC

LANDSCAPE-TURF

The field of environmental horticulture pertains to floriculture, landscape design and maintenance, and greenhouse and nursery management. This program provides a study of ornamental plant materials and propagation and how they relate to landscape design construction, installation, maintenance, and turfgrass management. At the completion of the second year, the student may receive the associate in applied science degree. Employment potential includes golf course maintenance, landscape designer, retail sales manager, landscape contractor, landscape park maintenance supervisor and irrigation specialist.

FIRST YEAR

First Quarter¹

AGGEN 156 Equipment Operation and Maintenance 5
AGHRT 102 Pesticides and Application Equipment 5
AGHRT 110 Fall Landscape Plant Materials 5
AGHRT 171 Agricultural Leadership Training 1
APLED 112 Applied Mathematics² 3
 Total 19

Second Quarter³

AGGEN	151	Agriculture Shop Skills	4
AGHRT	104	Principles of Pest Management	5
AGHRT	126	Computer Essentials for Environmental Sciences	2
AGHRT	172	Agricultural Leadership Training	1
AGHRT	204	Landscape Graphics	4
APLED	121	Applied Written Communication²	4
		Total	**20**

Third Quarter⁴

AGHRT	112	Spring Landscape Plant Materials	5
AGHRT	206	Landscape Construction	5
AGHRT	226	Turfgrass Management	5
ENVSC	110	Plant Biology	5
		Total	**20**

SECOND YEAR

Fourth Quarter (Summer)⁵

AGHRT	266	Cooperative Education Seminar	1
AGHRT	267	Cooperative Education Work Experience	3
		Total	**4**

Fifth Quarter¹

AGHRT	115	Pruning	3
AGHRT	116	Green Industry Management	5
AGHRT	202	Principles of Irrigation	5
ENVSC	210	Environmental Soil Science	5
		Total	**18**

Sixth Quarter³

AGHRT	205	Landscape Design	4
AGHRT	228	Arboriculture	5
GBUS	280	Human Relations in Business	5
MMGT	205	Small Business Planning	5
		Total	**19**

Seventh Quarter⁴

AGHRT	114	Landscape Maintenance	3
AGHRT	201	Landscape Installation	5
AGHRT	225	Weed Biology and Control	5
AGHRT	230	Plant Problem Diagnosis	5
AGHRT	232	Pest Management Project	2
		Total	**20**

Certificate

The landscape turf certificate provides a study of landscape design and turfgrass management. Students must enter in the fall quarter in order to finish three quarters.

First Quarter¹

AGGEN	156	Equipment Operation and Maintenance	5
AGHRT	102	Pesticides and Application Equipment	5
AGHRT	110	Fall Landscape Plant Materials	5
AGHRT	171	Agricultural Leadership Training	1
APLED	112	Applied Mathematics²	3
		Total	**19**

Second Quarter³

AGGEN	151	Agriculture Shop Skills	4
AGHRT	104	Principles of Pest Management	5
AGHRT	126	Computer Essentials for Environmental Sciences	2
AGHRT	172	Agricultural Leadership Training	1
AGHRT	204	Landscape Graphics	4
APLED	121	Applied Written Communication²	4
		Total	**20**

Third Quarter⁴

AGHRT	112	Spring Landscape Plant Materials	5
AGHRT	206	Landscape Construction	5
AGHRT	226	Turfgrass Management	5
ENVSC	110	Plant Biology	5
		Total	**20**

120 credits are required for an A.A.S. degree and 59 credits are required for a certificate.

[1] These courses may be offered in fall quarter only.

[2] This related education requirement may be met by any course or combination of courses approved by the instructional dean.

[3] These courses may be offered in winter quarter only.

[4] These courses may be offered in spring quarter only.

[5] These courses may be offered in summer quarter only.

HOTEL AND RESTAURANT MANAGEMENT

A.A.S. Degree: SCC

The hotel and restaurant management program is a two-year course of study designed to develop qualified students in the organization and operation of hotels, motels and restaurants. Emphasis is placed on all aspects of food and beverage services including the operation of large and small restaurants and commercial/industrial food service programs; the management of such lodging facilities as all suite properties, hotels, resorts, private clubs, and bed and breakfast operations; and the study of travel and tourism and its impact on the hotel/restaurant industry.

The training provided by the hotel and restaurant management program prepares students for entry into the fastest growing industry in the United States today. Individuals seeking a secure future in an exciting field should consider enrolling in the hotel and restaurant management program.

A grade of 2.0 or better must be maintained in all hotel and restaurant management courses required for a degree.

FIRST YEAR

First Quarter

APLED	121	Applied Written Communication¹	4
CIS	110	Introduction to Computer Applications	5
HM	110	Introduction to Hospitality	5
HM	115	Food Sanitation²	3
		Total	**17**

Second Quarter-Hotel Option

HM	112	Hospitality Mathematics	3
HM	126	Food Science	5
HM	141	Maintenance and Engineering	5
HM	160	Supervisory Housekeeping	3
MMGT	223	Customer Service	3
		Total	**19**

Second Quarter-Restaurant Option

HM	112	Hospitality Mathematics	3
HM	126	Food Science	5
HM	141	Maintenance and Engineering	5
MMGT	223	Customer Service	3
		Total	**16**

Third Quarter

APLED	125	Employment Preparation¹	3
HM	130	Human Relations	5
HM	266	Cooperative Education Seminar AND³	
HM	267	Cooperative Education Work Experience OR³	
HM	288	Cooperative Education Work Experience (No Seminar)³	5
ISFTY	111	Industrial First Aid	2
		Total	**15**

Fourth Quarter-Hotel Option

HM	111	Seminar-Hotel/Restaurant/Tourism	2
HM	202	Front Office Procedures	5
HM	220	Tourism and the Hospitality Industry	5
HM	265	Hospitality Cost Controls	5
		Total	**17**

Fourth Quarter-Restaurant Option

HM	111	Seminar-Hotel/Restaurant/Tourism	2
HM	156	Beverage Management	3
HM	220	Tourism and the Hospitality Industry	5
HM	265	Hospitality Cost Controls	5
		Total	**15**

SECOND YEAR

Fifth Quarter-Hotel Option

HM   232   Hotel/Restaurant Management Principles 5
MMGT   231   Human Resource Management 5
SPCH   220   Intercultural Communication 5
         Total 15

Fifth Quarter-Restaurant Option

HM   232   Hotel/Restaurant Management Principles 5
HM   255   Menu Planning. 3
MMGT   231   Human Resource Management 5
SPCH   220   Intercultural Communication 5
         Total 18

Sixth Quarter

ACCT   151   College Accounting I 5
GBUS   140   International Marketing 3
HM   205   Hotel/Restaurant Law 5
HM   208   Hotel Sales and Marketing 5
         Total 18

Seventh Quarter

CUL   123   Espresso 2
CUL   127   Banquet Service 2
CUL   131   A la Carte Service. 9
HM   266   Cooperative Education Seminar AND[3]
HM   267   Cooperative Education Work Experience OR[3]
HM   288   Cooperative Education Work Experience (No Seminar)[3] .5
         Total 18

117-119 credits are required for an A.A.S. degree.

[1] *This course may be substituted with any course or combination of courses approved by the instructional dean.*

[2] *This course is required for certification by the Educational Foundation of the National Restaurant Association.*

[3] *Cooperative Education course credits are variable and can be added to any quarter or taken during summer quarter. 10 credits are required for graduation.*

HYDRAULIC AND PNEUMATIC AUTOMATION TECHNOLOGY

A.A.S. Degree, Certificate: SCC

Graduates from the hydraulic and pneumatic automation technology program have developed skills to qualify for employment in hydraulic and pneumatic sales, automated equipment fabrication or plant machinery maintenance work.

Activities in sales and distribution vary from warehousing, inside sales, purchasing, outside sales, power unit fabrication to field service work. Each area offers challenging work, with most employers providing on-the-job training for product familiarization and developing the special skills required for sales and service in pneumatic automation products.

Activities include equipment or circuit design, shop assembly, installation of complex electro-hydraulic systems, field installation of new equipment or servicing existing equipment. Field service can involve world travel with a lot of time away from home.

Activities in industrial plant maintenance vary from installing new equipment to troubleshooting and repairing existing equipment. This requires developing analytical procedures and certain mechanical abilities or skills to improve equipment performance and reliability.

A 2.0 GPA or better must be maintained in all hydraulic and pneumatic automation technology coursework before advancing to the subsequent quarter. Students not meeting this minimum requirement may repeat the course(s) one time before progressing. A student who is below the minimum 2.0 GPA may seek a one-time waiver with the approval of the division dean.

FIRST YEAR

First Quarter

AGGEN 152   Arc Welding 4
FLPT   111   Hydraulic Calculations 5
FLPT   112   Hydraulic Basics and Theory. 5
FLPT   113   Blueprint Reading 4
FLPT   114   Basic Hydraulics Lab 2
             Total 20

Second Quarter

BT   100   Keyboarding for Computers 1
CIS   105   Computer Fundamentals for Vocations I 4
FLPT   121   Pneumatic Theory 6
FLPT   122   Drawing Fundamentals. 3
FLPT   123   Machine Controls 7
             Total 21

Third Quarter

APLED 121   Applied Written Communication[1] 4
FLPT   131   Hydraulic Systems 6
FLPT   132   Fluid Line Fabrication 2
FLPT   133   Fluid Line Connectors 5
FLPT   134   Shop Drawing 2
FLPT   135   Fluid Line Sizing Calculations 2
             Total 21

SECOND YEAR

Fourth Quarter

APLED 123   Leadership Skills for Business and Industry[1]. 3
FLPT   241   Fluid Power Shop Theory 5
FLPT   242   Machine Tool Operation 7
FLPT   243   Advanced Machine Controls. 3
FLPT   244   Machine Feed and Speed Calculations 1
             Total 19

Fifth Quarter

APLED 125   Employment Preparation[1]. 3
FLPT   251   Hydraulic Circuits 4
FLPT   252   Hydraulic Component Repair. 6
FLPT   253   Fluid Line Layout and Assembly 2
FLPT   254   Advanced Hydraulics Lab 3
FLPT   279   Proportional Valves. 4
             Total 22

Sixth Quarter (Student will choose one option.)

Option A[2]

AGGEN 161   Advanced Maintenance Welding 1
FLPT   261   Hydraulic Component Testing 6
FLPT   262   Machining Hydraulic Manifolds. 5
FLPT   263   Power Unit Fabrication 3
ISFTY 111   Industrial First Aid 2
             Total 17

Option B[2]

FLPT   264   Fluid Power Computer Applications 4
FLPT   265   Hydraulic Circuit Design 3
FLPT   268   Fluid Power Application and Sales. 5
FLPT   269   Hydraulic Manifold Design. 3
ISFTY 111   Industrial First Aid 2
             Total 17

Certificate

First Quarter

AGGEN 152   Arc Welding 4
FLPT   111   Hydraulic Calculations 5
FLPT   112   Hydraulic Basics and Theory. 5
FLPT   113   Blueprint Reading 4
FLPT   114   Basic Hydraulics Lab 2
             Total 20

Second Quarter

BT   100   Keyboarding for Computers 1
CIS   105   Computer Fundamentals for Vocations I 4
FLPT   121   Pneumatic Theory 6
FLPT   122   Drawing Fundamentals. 3
FLPT   123   Machine Controls 7
             Total 21

Third Quarter

APLED	121	Applied Written Communication[1]	4
FLPT	131	Hydraulic Systems	6
FLPT	132	Fluid Line Fabrication	2
FLPT	133	Fluid Line Connectors	5
FLPT	134	Shop Drawing	2
FLPT	135	Fluid Line Sizing Calculations	2
		Total	**21**

Fourth Quarter

APLED	123	Leadership Skills for Business and Industry OR	
APLED	125	Employment Preparation	3
		Total	**3**

120 credits are required for an A.A.S. degree and 65 credits are required for a certificate.

[1] *This related education requirement may be met by any course or combination of courses approved by the instructional dean.*

[2] *Sixth quarter courses may be substituted with the following courses with department permission: FLPT 266 (1 credit) and FLPT 267 (1 to 16 credits) or FLPT 288 (1 to 17 credits).*

INFORMATION PROCESSING

A.A.S. Degree: SFCC

This program is for students who desire to work in an office environment using their skills in computer software applications, desktop publishing, web publishing, communications, business management, and office procedures.

This two-year degree prepares graduates to choose from a wide variety of positions available in business, industry, or non-profit organizations. Students will acquire speed and accuracy on the keyboard, develop business writing skills, acquire skills in troubleshooting routine computer problems, and develop a solid working knowledge of Microsoft Applications. Students will complete capstone courses which will integrate classroom learning into "real-world" office situations.

Students will have the opportunity to bridge the gap between the classroom and the working world by participating in model office simulations as well as a professional work experience internship.

FIRST YEAR

First Quarter

BT	101	Keyboarding[1]	5
BT	107	Business Communications[2]	3
GENST	106	College Success	3
IS	120	Business Computer Use	3
IS	160	Internet Fundamentals	1
		Total	**15**

Second Quarter

ACCT	103	Fundamental Bookkeeping Procedures	3
BT	102	Document Processing	5
BT	108	Business Communications[2]	3
GBUS	102	Math Skills for Business[3]	3
		Elective	1
		Total	**15**

Third Quarter

BT	103	Formatting	5
BT	155	Records Information Management	3
BT	231	Office Procedures	5
CAPPS	112	Excel	2
GRDSN	158	PhotoShop I	2
		Total	**17**

SECOND YEAR

Fourth Quarter

BT	170	WordPerfect 1	2
BT	257	Presentation Graphics/Publishing	3
BT	272	Business Correspondence	5
GRDSN	126	Web Production	2
IS	210	Internet Programming I	3
		Total	**15**

Fifth Quarter

BT	235	Machine Transcription	5
BT	255	Business Productivity Tools	3
BT	260	Administrative Office Management	5
CAPPS	114	Access	2
CAPPS	120	Outlook	2
		Total	**17**

Sixth Quarter

BT	160	Job Preparation Techniques	3
BT	201	Information Processing	5
BT	234	Administrative Professional Practicum	5
BT	270	Office Computer Support	3
BT	285	Administrative Professional Internship	2
		Total	**18**

97 credits are required for an A.A.S. degree.

See department for listing of approve electives.

[1] *Students may take BT 102 if they possess keyboarding skills at 35 wpm and knowledge of business document formatting. Permission of instructor recommended.*

[2] *ENG 101 may be substituted.*

[3] *GBUS 103 may be substituted.*

INFORMATION TECHNOLOGY

A.A.S. Degree: SFCC

The Information Technology A.A.S. degree program is designed to provide students with capabilities in several areas of information technology:

- Computer and network installation and maintenance skills.
- Business computing skills including daily systems operations and applications programs
- Security and Forensics skills
- Various Internet and network skills including web pages design, client/server side programming, web server installation and maintenance.
- Transfer option to a four year institution

This degree insures that the student is knowledgeable in a broad spectrum of information technology subjects that are often needed by the IT industry. There are four areas of emphasis: General Development, Forensics/Security, Web Development, and Transfer. The first year is made up of mostly core requirements with more specialization in the second year.

Core Requirements

FIRST YEAR

First Quarter

IS	101	Survey of Information Technology	2
IS	142	Hardware Fundamentals	3
IS	143	Operating System Fundamentals	2
IS	144	Programming Fundamentals	3
IS	160	Internet Fundamentals	1
MATH	099	Intermediate Algebra	5
		Total	**16**

Second Quarter

BT	100	Keyboarding for Computers	1
CAPPS	110	Word	3
CAPPS	112	Excel	3
CS	121	Unix/Linux	3
CS	223	VB.NET	5
GRDSN	158	PhotoShop I[1]	0-2
		Total	**15-17**

Third Quarter

BT	272	Business Correspondence OR	
ENG	205	Technical Writing	5
CAPPS	114	Access	3
IS	132	Computer Ethics	3
		Electives List A	5
		Total	**16**

General Development

SECOND YEAR

Fourth Quarter

IS	162	Data Communications and Networks	3
IS	164	Network Management	5
IS	210	Internet Programming I	5
IS	244	Network Security I	5
		Total	**18**

Fifth Quarter

IS	240	Computer and Network Support	5
IS	260	Database Theory	5
		List B Electives	5
		Total	**15**

Sixth Quarter

CAPPS	120	Outlook	2
GRDSN	158	PhotoShop I	2
IS	209	Internet Project	3
IS	228	Internet Servers	4
IS	266	Cooperative Education Seminar	1
IS	267	Cooperative Education Work Experience	2
		Total	**14**

94 credits are required for this A.A.S. degree.

Forensics/ Security Emphasis

SECOND YEAR

Fourth Quarter

IS	162	Data Communications and Networks	3
IS	164	Network Management	5
IS	234	Computer Forensics I	5
IS	244	Network Security I	5
		Total	**18**

Fifth Quarter

IS	236	Computer Forensics II	5
IS	240	Computer and Network Support	5
IS	245	Network Security II	5
		Total	**15**

Sixth Quarter

CAPPS	120	Outlook	2
IS	238	Computer Forensics III	5
IS	247	Network Security III	5
IS	266	Cooperative Education Seminar	1
IS	267	Cooperative Education Work Experience	2
		Total	**15**

95 credits are required for this A.A.S. degree.

Web Development Emphasis

SECOND YEAR

Fourth Quarter

GRDSN	126	Web Production	2
IS	162	Data Communications and Networks	3
IS	164	Network Management	5
IS	210	Internet Programming I	5
		Total	**15**

Fifth Quarter

CAPPS	120	Outlook	2
IS	212	Internet Programming II	5
IS	216	Applied XML	3
IS	260	Database Theory	5
		Total	**15**

Sixth Quarter

IS	209	Internet Project	3
IS	214	Internet Programming III	5
IS	228	Internet Servers	4
IS	266	Cooperative Education Seminar	1
IS	267	Cooperative Education Work Experience	2
		Total	**15**

94 credits are required for an A.A.S. degree.

Transfer Emphasis

SECOND YEAR

Fourth Quarter

IS	162	Data Communications and Networks	3
IS	164	Network Management	5
IS	210	Internet Programming I	5
IS	244	Network Security I	5
		Total	**18**

Fifth Quarter

IS	240	Computer and Network Support	5
IS	260	Database Theory	5
		Electives List C	5
		Total	**15**

Sixth Quarter

CAPPS	120	Outlook	2
IS	228	Internet Servers	4
IS	266	Cooperative Education Seminar	1
IS	267	Cooperative Education Work Experience	2
		Electives List C	5
		Total	**14**

94 credits are required for this A.A.S. degree.

LIST A-LEADERSHIP APPROVED ELECTIVES:

BT	260	Administrative Office Management	5
GBUS	105	Principles of Leadership	3
GBUS	280	Human Relations in Business	5
HS	136	Improving Interpersonal Communication	5
HS	238	Group Effectiveness Training	5
HSSUB	277	Group Process in Chemical Dependency Treatment	5
IS	250	Introduction to E-commerce	5

LIST B-APPROVED ELECTIVES:

BT	160	Job Preparation Techniques	3
GENST	115	Internet Issues	2
SBM	101	How to Start a Small Business	5
		Any IS/CS class	2-5

LIST C-TRANSFER APPROVED ELECTIVES:

Non-Elective Classes from AA distribution list.

[1] *Web Development Option only.*

INTEGRATED BUSINESS AND ENTREPRENEURSHIP PROGRAM

Certificate: SCC

The IBE program offers a hands-on approach to training our future business leaders and entrepreneurs. Students from all areas of study will participate in a year-long business experience where they will create a business from the ground up. College instructors and local business and community leaders guide student teams through the process of starting and launching a business. Students will master academic material by producing deliverables in an authentic business environment created on the SCC campus.

Select students enter the program after completing an application and interview process facilitated by the IBE instructors.

First Quarter[1]

IBE	201	Integrated Business and Entrepreneurship Principles I	10
		Total	**10**

Second Quarter

IBE	202	Integrated Business and Entrepreneurship Principles II	10
		Total	**10**

Third Quarter

IBE	203	Integrated Business and Entrepreneurship Principles III	10
		Total	**10**

30 credits are required for a certificate.

[1] *Select students enter the program after completing an application and interview process.*

INTERIOR DESIGN

A.A.S. Degree, Professional Diploma: SFCC

The interior design program at Spokane Falls Community College offers a broad-based and professionally relevant curriculum designed to enable graduates to successfully compete for jobs and to function as interior designers. Students who enter the program have various alternatives. They may complete an associate in applied science degree (A.A.S.) in six quarters with an emphasis in residential design. These students could obtain employment in residential-oriented retail establishments such as wallcovering and furniture stores.

Students also may receive a professional interior design diploma in addition to the A.A.S. degree by completing an optional one-year program. These students will have their A.A.S. prior to beginning the additional year. The third year will qualify students for entry-level positions as professional interior designers and will emphasize commercial design, business, communications and advanced design specialty courses. These students will have a broader range of employment opportunities with architectural firms, commercial design firms, as well as a variety of retail design establishments. Students completing the additional year are required to prepare a portfolio and complete at least 165 hours of internship that will ease the transition from school to work. In order to be certified into the third year program, students must complete a review process upon completion of their second year.

Spokane Falls Community College and Washington State University have an articulation agreement offering interior design students the best of both worlds in education and career choices. The partnership allows students to begin at SFCC, earn a three-year professional diploma, then transfer with senior standing to WSU Spokane's Interdisciplinary Design Institute, where they can earn a four-year bachelor's degree. For more information, refer to the Interior Design-Transfer Track Career Planning Guide.

FIRST YEAR

First Quarter
HS	136	Improving Interpersonal Communication	5
INTDS	105	Design Drawing	4
INTDS	170	Elements of Interior Design	5
INTDS	173	Architectural Graphics[1]	4
		Total	**18**

Second Quarter
ENG	101	English Composition	5
INTDS	106	Sketching Techniques	4
INTDS	179	History of Interiors I	3
INTDS	184	Architectural Graphics II	4
		Total	**16**

Third Quarter
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication OR	
ENG	111	Composition For Speech AND	
SPCH	285	Effective Speaking	5
INTDS	107	Rendering Techniques	4
INTDS	187	Perspective Sketch	4
INTDS	280	Textiles for Interiors	5
		Total	**18**

SECOND YEAR

Fourth Quarter
GBUS	102	Math Skills for Business OR	
MATH	115	Math for the Liberal Arts	3-5
INTDS	171	Interior Design Studio I	6
INTDS	174	Design Presentation	4
INTDS	175	Materials of Interior Design	5
		Total	**18–20**

Fifth Quarter
FMDSE	180	Retail Sales Techniques OR	
IS	120	Business Computer Use	3
INTDS	172	Interior Design Studio II	6
INTDS	180	History of Interiors II	3
INTDS	186	Lighting Design	3
		Total	**15**

Sixth Quarter
INTDS	176	Special Environments	6
INTDS	181	History of Interiors III	3
INTDS	185	Architectural Space Systems	4
		Elective	5
		Total	**18**

103-105 credits are required for an A.A.S. degree.

Professional Diploma
First Quarter
INTDS	275	Professional Practices	3
INTDS	281	Commercial Design Studio I	6
INTDS	285	Computer Aided Design I	4
		Elective	4
		Total	**17**

Second Quarter
INTDS	282	Commercial Design Studio II	6
INTDS	286	Computer Aided Design II	4
INTDS	287	Digital Interior Design Technology	4
		Total	**14**

Third Quarter
INTDS	266	Cooperative Education Seminar	2
INTDS	267	Cooperative Education Work Experience	5
INTDS	268	Design Portfolio	3
		Elective	5
		Total	**15**

46 credits are required for a Professional Diploma.

Note: Students must have completed the A.A.S. degree in interior design and complete the review processes to enroll in commercial design specialty courses and earn a professional diploma.

[1] See department for list of suggested electives.

INTERNATIONAL BUSINESS

Certificate: SFCC

The international business certificate is designed to meet the growing demand for internationally related skills. It is offered as a stand-alone certificate for students and business people who need specific credentials in the international area OR as an internationally oriented training certificate for students with career goals and degrees in traditional business fields such as marketing, management, accounting, retailing and so on.

The program has two objectives:

■ To introduce students to the world of global business, to expose them to intercultural implications involved in doing business internationally and to prepare them for entry-level positions.

■ To prepare currently employed business people, who have specific job skills, for advancement to positions of greater responsibility with an international emphasis.

First Quarter
BT	107	Business Communications	3
GBUS	102	Math Skills for Business	3
GBUS	120	International Business	5
GBUS	180	Travel and Tourism	3
MMGT	181	Leadership Training-DEC	1
		Total	**15**

Second Quarter
ECON	100	Fundamentals of Economics	5
GBUS	140	International Marketing	3
GBUS	185	Travelography: Destinations for Business and Tourism	3
GENST	291	Educational Tour	2
MMGT	182	Leadership Training-DEC	1
		Special Project[1]	1
		Total	**15**

30 credits are required for a certificate.

[1] Special project may be in the form of a written report, seminar attendance, cooperative education work experience, directed study or internship.

INTERNET

Certificate: SFCC

The Internet certificate program provides students with the skills necessary to design implement and maintain World Wide Web sites in a professional manner.

Student learn Internet basics and web design principles; to effectively incorporate graphics and multimedia into web pages; to format pages using markup language; web programming; to incorporate programming into interactive pages; and the culture of how the internet works. Students also gain experience in combining all of these skills in real-world situations.

This certificate is designed to be either a stand-alone program or to be combined with the other programs or experience to add needed skills.

The additional Networking option provides students with the skills required for dealing with the hardware and software used to maintain a Web server.

Internet

First Quarter

CS	101	Computer Literacy[1]	5
GRDSN	126	Web Production	2
GRDSN	158	PhotoShop I	2
IS	210	Internet Programming I	5
		Total	**14**

Second Quarter

CAPPS	114	Access[2]	3
CAPPS	132	Frontpage	1
CS	223	VB .NET[3]	5
IS	212	Internet Programming II	5
		Total	**14**

Third Quarter

IS	209	Internet Project	3
IS	214	Internet Programming III	5
		Approved Electives	5
		Total	**13**

41 credits are required for this certificate.

APPROVED ELECTIVES:

CAPPS	114	Access[2]	2
GRDSN	166	PhotoShop II	2
IS	250	Introduction to E-commerce	5
SBM	101	How to Start a Small Business	5

[1] Concurrently enrolled on MATH 91 or higher placement.

[2] Access is a variable 5-credit course. Students may enroll in an additional 2 credits of Access to satisfy the elective component.

[3] Concurrently enrolled on MATH 92 or higher placement.

Internet: Networking Option

First Quarter

CS	101	Computer Literacy[1]	5
GRDSN	158	PhotoShop I	2
IS	162	Data Communications and Networks	3
IS	210	Internet Programming I	5
		Total	**15**

Second Quarter

CAPPS	114	Access[2]	2
CS	223	VB .NET[3]	5
IS	164	Network Management	5
		Total	**12**

Third Quarter

IS	132	Computer Ethics	3
IS	209	Internet Project	3
IS	228	Internet Servers	4
		Approved Electives	3
		Total	**13**

40 credits are required for this certificate.

APPROVED ELECTIVES:

CAPPS	114	Access[2]	2
CAPPS	132	Frontpage	1
GENST	115	Internet Issues	2
GRDSN	166	PhotoShop II	2
IS	250	Introduction to E-commerce	5
SBM	101	How to Start a Small Business	5

[1] Concurrently enrolled on MATH 91 or higher placement.

[2] Access is a variable 5-credit course. Students may enroll in an additional 3 credits of Access to satisfy the elective component.

[3] Concurrently enrolled on MATH 92 or higher placement.

INTERPRETER TRAINING PROGRAM/ DEAFNESS

A.A.S. Degree, Certificate: SFCC

Interpreter training program/deafness is an innovative program designed to train people to work with the hearing impaired. Graduates of the program have acquired the necessary skills to work with the hearing impaired in the following areas:

- Education—as an interpreter, interpreter tutor or teacher's assistant
- Community services—vocational rehabilitation, community service centers and other agencies
- Sign language teachers—setting up sign language courses in local areas
- Industrial settings—as interpreters in large companies to assist with on-the-job training and/or other designated positions

Those who are skilled interpreters, in addition to having a trade or profession, provide a valuable service to society, making it possible to provide equal access for the hearing impaired to all areas of employment, social services and education.

FIRST YEAR

First Quarter

ENG	151	College Reading and Study Skills	5
HS	136	Improving Interpersonal Communication	5
HSEAR	101	American Sign Language I[1]	5
HSEAR	106	Introduction to Deaf Culture[1]	5
		Total	**20**

Second Quarter

HSEAR	102	American Sign Language II[1]	5
HSEAR	151	Education of the Hearing Impaired[1]	5
		Basic Skills Elective (Communication)	5
		Social Service Elective[2]	5
		Total	**20**

Third Quarter

HSEAR	103	American Sign Language III[1]	5
HSEAR	154	Introduction to Interpreting[1]	5
		Education Elective[2]	5
		Social Science Elective[2]	5
		Total	**20**

SECOND YEAR

Fourth Quarter

ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
HSEAR	201	Voicing[1]	5
HSEAR	251	ASL Interpreting I[1]	5
		Total	**15**

Fifth Quarter

GBUS	102	Math Skills for Business	3
HLTH	101	Health and Wellness OR	
HLTH	174	First Aid	3
HSEAR	202	Transliterating I[1]	5
HSEAR	252	ASL Interpreting II[1]	5
		Science Elective[2]	5
		Total	**21**

Sixth Quarter

HSEAR 203 Transliterating II[1]
HSEAR 253 ASL Interpreting III[1] 5
HSEAR 281 Interpreting Practicum I[1] 5
      Humanities Elective[2] 5
      Total **20**

Certificate

Students applying for a certificate of completion must complete a specified 63-credit sequence of courses in the human services interpreter training program/deafness program.

GBUS 102 Math Skills for Business 3
HSEAR 102 American Sign Language II[1] 5
HSEAR 103 American Sign Language III[1] 5
HSEAR 106 Introduction to Deaf Culture[1] 5
HSEAR 151 Education of the Hearing Impaired[1] 5
HSEAR 154 Introduction to Interpreting[1] 5
HSEAR 201 Voicing[1] 5
HSEAR 202 Transliterating I[1] 5
HSEAR 203 Transliterating II[1] 5
HSEAR 251 ASL Interpreting I[1] 5
HSEAR 252 ASL Interpreting II[1] 5
HSEAR 253 ASL Interpreting III[1] 5
HSEAR 281 Interpreting Practicum I[1] 5
      Total **63**

116 credits are required for the A.A.S. degree and 63 credits are required for a certificate.

Students who have completed the above requirements may apply for the certificate by completing the Application for Education Certificate form, which is available in the human services department office.

[1] *These courses are offered every quarter, except summer.*
[2] *Electives must be related to the student's declared field of interest and approved by the interpreter training program/deafness adviser.*

INVASIVE CARDIOVASCULAR TECHNOLOGY

A.A.S. Degree: SCC

The invasive cardiovascular technologist is a health care professional who, through the use of specific high-technology equipment and at the direction of a qualified physician, performs procedures on patients leading to the diagnosis and treatment of congenital and acquired heart disease, and peripheral vascular disease.

As a member of the cardiac catheterization team, the cardiovascular technologist is a surgical scrub assistant, monitors the patient's condition and operates other "CATH Lab." equipment.

The most important "CATH Lab" studies are coronary angiography, percutaneous coronary intervention (where stents, balloons, plaque removal devices, and other treatments to restore blood flow are deployed), right heart catheterization (where blood flow measurements are made), electrophysiology (where irregular heartbeats are created, studied and treated) and pacemaker implantations.

The invasive cardiovascular technologist also works with physicians during critical times during heart attacks by restoring blood flow to diseased areas of the heart. They assist with percutaneous revascularization, give clot-dissolving drugs, and operate cardiac assist pumps.

The first year of the cardiovascular program teaches basic sciences and cardiology and is combined with the noninvasive cardiovascular program. In the second year, the invasive students concentrate on the technical duties of a cardiac catheterization technologist and spend time working in local hospital cardiac laboratories.

Upon completion of the didactic training (six quarters), the student selects an out-of-town medical center where he/she will complete the final quarter of clinical internship. Students may take the CCI National Registry Exam upon graduation. The program is the only CAAHEP approved invasive technology program in the northwestern United States.

Admission Prerequisite/Requirements:

- High school diploma or GED certificate
- MATH 099
- CHEM 161
- BIOL 101
- Appropriate scores in one of the following: ASSET or Compass

Admissions Recommendations:

- Computer skills
- Active email account

FIRST YEAR

First Quarter

A-P 242 Human Anatomy and Physiology 5
CHEM 120 Organic and Biochemistry for the Health Sciences. . . . 5
ICT 114 Cardiovascular I 4
NCT 113 Electrophysiology I. 4
      Total **18**

Second Quarter

A-P 243 Human Anatomy and Physiology 5
ICT 124 Cardiovascular II 4
NCT 123 Electrophysiology II 4
PHYS 120 Fundamentals of Medical Physics 5
      Total **18**

Third Quarter

ICT 134 Invasive Cardiovascular Fundamentals 5
ICT 138 Cardiovascular Physiology 3
NCT 133 Noninvasive Cardiovascular Fundamentals 5
PHYS 121 Medical Physics II 4
      Total **17**

Fourth Quarter

ICT 144 Cardiac Catheterization I 11
      Total **11**

SECOND YEAR

Fifth Quarter

ICT 214 Cardiac Catheterization II 15
      Total **15**

Sixth Quarter

ICT 224 Cardiac Catheterization III 15
      Total **15**

Seventh Quarter

ICT 234 Cardiac Catheterization IV 13
      Total **13**

107 credits are required for an A.A.S. degree.

A 2.0 grade must be maintained quarterly in each course before proceeding to the next quarter.

Students may repeat an invasive cardiovascular course once, but it must be repeated within two years.

LEGAL ADMINISTRATION

A.A.S. Degree: SCC

Legal administration is a career path in which the individual is typically employed in a supervisory role in a law office or other legal setting (court administration, etc.). The role requires management, financial, accounting, computer information systems, human resource management and legal knowledge. Admission into the degree program requires the permission of the paralegal program coordinator and is dependent upon experience and training. Experience and/or training in administration, marketing, accounting, business management, or law is preferred, but is not a mandatory prerequisite.

FIRST YEAR

First Quarter

ENG 101 English Composition 5
MATH 099 Intermediate Algebra 5
MMGT 101 Principles of Management 5
      Total **15**

Second Quarter

ACCT	101	Principles of Accounting	5
LA	218	Employment Law	3
MMGT	211	Marketing	5
SPCH	201	Speech for Business and Professions	3
		Total	**16**

Third Quarter

ACCT	102	Principles of Accounting	5
CATT	134	Presentation Graphics	5
MMGT	231	Human Resource Management	5
		Total	**15**

SECOND YEAR

Fourth Quarter

ACCT	162	Business Tax Accounting	1
CIS	240	Introduction to Networks	5
GBUS	280	Human Relations in Business	5
LA	245	Supervised Legal Work Experience[1]	3
		Total	**14**

Fifth Quarter

GBUS	217	Business Statistics	5
LA	212	Administrative Law	3
LA	240	Special Issues Seminar	5
LA	245	Supervised Legal Work Experience[1]	4
		Total	**17**

Sixth Quarter

CATT	138	Microsoft Excel I	2.5
CATT	139	Microsoft Excel II	2.5
LA	230	Insurance Law for Legal Assistants	3
LA	245	Supervised Legal Work Experience[1]	5
		Total	**13**

92 credits are required for an A.A.S. degree.

[1] A total of 3 credits of MMGT 100 (Supervised Volunteer Experience) may be used to substitute a portion of LA 245.

LEGAL ADMINISTRATIVE ASSISTANT

A.A.S. Degree, Certificate: SCC

The legal administrative assistant program combines a well-balanced academic program with expert legal office instruction, giving the student the diversified training and background needed to hold a position of responsibility and importance in many areas of the legal world. This program helps raise the legal office skills of the student to a professional level, gives the student a technical background through completion of technical skill courses and an academic background, provides the student a mature understanding of professional responsibilities, and provides for minimum additional on-the-job training.

FIRST YEAR

First Quarter

BT	090	Basic Grammar for Business II	5
BT	102	Document Processing[1]	5
BT	151	Business Student Preparation	5
		Total	**15**

Second Quarter

BT	109	Business Communications	5
BT	165	Word Processing	5
CATT	102	Introduction to Outlook	2.5
GBUS	103	Basic Business Math and Electronic Calculators	5
		Total	**17.5**

Third Quarter

BT	160	Job Preparation Techniques	3
BT	231	Office Procedures	5
BT	235	Machine Transcription	5
		Elective (from list of suggested courses)[2]	5
		Total	**18**

Fourth Quarter

BT	272	Business Correspondence	5
LSEC	236	Legal Terminology	5
LSEC	239	Legal Formatting[4]	5
LSEC	249	Legal Formatting Procedures[4]	5
		Total	**20**

Fifth Quarter

LSEC	216	Legal Office Procedures[5]	5
LSEC	237	Legal Terminology	5
LSEC	244	Legal Machine Transcription[6]	5
		Electives (from list of suggested courses)[2]	5
		Total	**20**

Sixth Quarter

BT	250	Information Technology	5
LA	105	Washington Court Rules-State and Federal[7]	3
LSEC	233	Legal Office Practice	7
LSEC	285	Legal Office Internship	3
		Total	**18**

108.5 credits are required with 2.0 grade or better in each class for an A.A.S. degree.

The program includes a mentoring program where students have the option to be assigned to work with a practicing legal administrative assistant during the school year to receive additional training and on-the-job experience.

[1] Students are placed in formatting courses according to their ability. Students who are given advanced standing in keyboarding classes will need to take business electives to meet the 108.5 credits requirement for graduation.

[2] Electives must be taken from the following list of courses - 10 credits total:

ACCT	101	Principles of Accounting OR	
ACCT	151	College Accounting I	5
BT	201	Information Processing	5
GBUS	204	Introduction to Law	5
GBUS	280	Human Relations in Business	5
MSEC	101	Medical Terminology and Anatomy	5
SPCH	102	Interpersonal Communication	5

Other unnamed 5-credit courses may be substituted with approval of the program coordinator.

[3] To enter the second year of the A.A.S. degree program, students must pass competency tests in the following areas:
- Math (fractions, percentages, etc.)
- Writing (write a basic letter, memo, and/or e-mail with correct spelling, punctuation, grammar, etc.)
- Format documents from unarranged copy in a timed situation (letters, memos, reports, tables) using MS Word
- Keyboarding skills of 40 wpm.

[4] Prerequisites for legal assistant students taking these classes as part of the legal assistant program are keyboarding skills of 40 wpm, BT 102, 109 and 165 with a 2.0 grade or better, or with permission of the program coordinator.

[5] LSEC 239 or 249 and enrollment in the legal administrative assistant program, or permission of the instructor.

[6] BT 235 and LSEC 239 or 249 with a 2.0 grade or better or permission of the instructor.

[7] LA 105 may be substituted with LA 223 (for students interested in seeking employment in Idaho).

Certificate[1]

First Quarter

BT	109	Business Communications[2]	5
BT	231	Office Procedures[3]	5
LSEC	236	Legal Terminology	5
LSEC	239	Legal Formatting[4]	5
LSEC	249	Legal Formatting Procedures[4]	5
		Total	**25**

Second Quarter

LSEC	216	Legal Office Procedures[5]	5
LSEC	237	Legal Terminology	5
LSEC	244	Legal Machine Transcription[6]	5
		Electives (see approved list)[7]	5
		Total	**20**

Third Quarter

GBUS	103	Basic Business Math and Electronic Calculators	5
LA	105	Washington Court Rules-State and Federal[8]	3
LSEC	233	Legal Office Practice	7
LSEC	285	Legal Office Internship	3
		Total	**18**

63 credits with a grade of 2.0 or better in each class are required for a certificate.

[1] *To enter the certificate program, students must pass a keyboarding test with 40 wpm or more and pass a skills test using the word processing package utilized in the legal administrative assistant program.*

[2] *Must be taken during the first quarter concurrent with LSEC 239 and 249.*

[3] *This course may be substituted with any related course, a combination of courses or prior office experience approved by the program coordinator.*

[4] *Prerequisites for legal assistant students taking these classes as part of the legal assistant program are keyboarding skills of 40 wpm, BT 102, 109 and 165 with a 2.0 grade or better, or with permission of the program coordinator.*

[5] *LSEC 239 or 249 and enrollment in the legal administrative assistant program or permission of instructor.*

[6] *BT 235 and LSEC 239 or 249 with a 2.0 grade or better or permission of instructor.*

[7] *Electives must be taken from the following list of courses:*

ACCT	101	*Principles of Accounting OR*
ACCT	151	*College Accounting I* ... 5
BT	201	*Information Processing* ... 5
GBUS	204	*Introduction to Law* ... 5
GBUS	280	*Human Relations in Business* ... 5
MSEC	101	*Medical Terminology and Anatomy* ... 5
SPCH	102	*Interpersonal Communication* ... 5

Other unnamed courses may be substituted with approval of program coordinator.

[8] *LA 105 may be substituted with LA 223 (for students interested in seeking employment in Idaho).*

LEGAL INFORMATION PROCESSING

Certificate: SCC

This program prepares students for legal office positions where the primary duties are the operation of disk-controlled computer equipment; typing and proofreading manuscripts, tables, reports, correspondence, and other documents from dictating machines or rough drafts; correcting errors in existing documents; and consulting with persons initiating job requests.

FIRST YEAR

First Quarter

BT	102	Document Processing	5
BT	109	Business Communications	5
BT	151	Business Student Preparation	5
LSEC	236	Legal Terminology	5
		Total	**20**

Second Quarter

BT	231	Office Procedures	5
CATT	102	Introduction to Outlook	2.5
LSEC	237	Legal Terminology	5
LSEC	239	Legal Formatting[1]	5
		Total	**17.5**

Third Quarter

BT	201	Information Processing	5
BT	272	Business Correspondence	5
GBUS	103	Basic Business Math and Electronic Calculators	5
LSEC	216	Legal Office Procedures	5
		Total	**20**

SECOND YEAR

Fourth Quarter

BT	165	Word Processing	5
BT	202	Advanced Information Processing	5
BT	250	Information Technology	5
LSEC	285	Legal Office Internship	3
		Total	**18**

75.5 credits are required for a certificate with a minimum grade of 2.0 in each class.

[1] *Prerequisites for enrollment in this class are BT 102, 109 and 165, and a keyboarding speed of 40 wpm, or permission of the program coordinator.*

LEGAL NURSE

Certificate: SCC

The primary role of the legal nurse consultant is to evaluate, analyze, and render informed opinions on the delivery of health care and the resulting outcomes. The legal nurse consultant practices this nursing specialty in a variety of settings, including law offices, government offices, insurance companies, risk management, or as a self-employed practitioner. The nurse serves as a liaison between the legal and health care communities. This nationally ranked ABA approved program is typically awarded upon completion of 62-67 credits of required course work (depending on math requirements). Note: A Legal Nurse graduate does not receive a license to practice law; thus performing legal work directly for the public or giving legal advice directly to the public constitutes the unauthorized practice of law.

Program Requirements

To enter the legal nurse certificate program, students must have completed an A.A.S. degree in nursing, and possess a current state license and at least two years' nursing experience with no more than one year since last employed in the field. Substitutions for prerequisites and program courses may be made and/or waived by the program coordinator.

Certificate Requirements

The certificate requires 10 credits of general education courses and 20 credits of basic law courses, plus 8 credits of LA 245, 24 credits of legal specialty courses and 5 credits of other courses if the student does not select from the math options portion of the general education courses. Students with at least one or more years of current legal experience under the direct supervision of an attorney may, with the approval of the program coordinator, have a part of LA 245 waived and instead substitute an equal number of additional legal specialty courses credits.

Students should begin early to meet the prerequisites for LA 120 which are LSEC 239 or 249 and a college-level computer course recommended to be selected from the BT, CIS or LSEC departments' offerings.

General Education Courses

MATH	111	Pre-Calculus I OR higher[1, 2]	5
		Social Science course[1] AND/OR	
		Humanities course[1]	5
		Total	**10**

Other Courses

GBUS	104	Business Mathematics[2]	0-5
		Total	**0-5**

Basic Courses

LA	100	Legal Careers Orientation	1
LA	102	Introduction to Legal Nursing	1
LA	105	Washington Court Rules-State and Federal	3
LA	110	Legal Research and Writing[3]	5
LA	118	Instrument Drafting	3
LA	120	Law Office Computing[4]	5
LA	130	Legal Ethics	1
LA	135	Professional Effectiveness	1
		Total	**20**

Supervised Legal Work Experience

LA	245	Supervised Legal Work Experience[5]	8
		Total	**8**

Specialty Courses[6]

GBUS	204	Introduction to Law	5
LA	218	Employment Law	3
LA	219	The Criminal Process	3
LA	220	Torts	3
LA	225	Trial Preparation and Procedures I	3
LA	227	Trial Preparation and Procedures II	3
LA	230	Insurance Law for Legal Assistants	3
LA	240	Special Issues Seminar[7]	1-10
LA	285	Legal Office Internship[8]	3
		Total	**24**

62-67 credits (depending on the student's choice of math) with a grade of 2.0 or higher in each class (including prerequisites) are required for a certificate.

Prerequisites and substitutions for courses may be made and/or waived by the program coordinator.

Students must complete a minimum of 2 credits each in math, social science or humanities.

[1] *See program coordinator for an additional list of courses.*

[2] *Only needed if the student chooses GBUS 104 as his/her math requirement. (Not required if MATH 111 or higher is chosen for the math requirement.)*

[3] *Prerequisite is ENG 101.*

[4] *Prerequisites are LSEC 239 or 249 and a college-level computer course recommended to be selected from the BT, CIS or LSEC departments' offerings.*

[5] *Students must complete 8 credits.*

[6] *Prerequisites for all Legal Specialty Courses: LA 100, 102, 110.*

[7] *Because each course is different, LA 240 may be repeated as frequently as desired and all credits received may be applied toward the 24 specialty credit requirement for degree.*

[8] *Maximum of 3 credits of internship may be applied toward this degree.*

LEGAL RECEPTIONIST

Certificate: SCC

This program prepares students for office positions in which the primary duties are performing general legal office work; greeting, scheduling and routing legal clients; and answering the telephone. After completing this program, students may choose to take additional courses for an advanced certificate or degree in the legal support professional field.

First Quarter

BT	090	Basic Grammar for Business II OR	
BT	109	Business Communications	5
BT	102	Document Processing	5
BT	151	Business Student Preparation	5
LSEC	236	Legal Terminology	5
		Total	**20**

Second Quarter

BT	165	Word Processing	5
CATT	102	Introduction to Outlook	2.5
LSEC	237	Legal Terminology	5
LSEC	239	Legal Formatting[2]	5
		Total	**17.5**

Third Quarter

BT	231	Office Procedures[1]	5
GBUS	103	Basic Business Math and Electronic Calculators OR	
GBUS	104	Business Mathematics	5
LSEC	216	Legal Office Procedures	5
LSEC	285	Legal Office Internship	3
		Total	**18**

55.5 credits, with a minimum of 2.0 grade in each class, are required for a certificate.

[1] *This course may be substituted with any related course, a combination of courses, or prior office experience approved by the program coordinator.*

[2] *Prerequisites for enrollment in this class are keyboarding speed of 40 wpm and BT 165 and 109 with a grade of 2.0 or better, or permission of the program coordinator.*

LIBRARY TECHNICIAN

A.A.S. Degree: SFCC

The library technician program is a two-year associate in applied science degree program that prepares students for careers as paraprofessionals in the library field. Students are trained to work in any department in any type of library. While routines particular to each library will be learned on the job, the program gives students exposure to a broad range of responsibilities common to most libraries.

Students can enter the program in any quarter to take electives. Electives can be taken online or in a traditional classroom. Electives are required from computer skills, computation skills, communication skills, and leadership/human relations skills classes.

The recommended library course sequence begins with the fall quarter and library skills courses must be taken in sequence in order to complete the degree in six quarters. Library skills classes are hybrid classes; students engage in online learning activities and are required to attend seminar sessions for lecture and lab training sessions.

FIRST YEAR

First Quarter

LMLIB	100	Introduction to Library Organizations and Careers	3
LMLIB	115	Introduction to Library Organizational Systems	5
		Computer Skills Electives[1]	6
		Total	**14**

Second Quarter

LMLIB	116	Introduction to Circulation Systems and Services	5
LMLIB	125	School Libraries and Media Centers	5
		Computer Skills Electives[1]	3
		Communication Skills Elective[2]	5
		Total	**18**

Third Quarter

LMLIB	117	Access Services, Customer Service and Collection Maintenance	5
LMLIB	135	Children's Literature and Library Services	5
		Computer Skills Electives[1]	3
		Communication Skills Elective[2]	5
		Total	**18**

SECOND YEAR

Fourth Quarter

LMLIB	210	Technical Services I: Acquisitions and Materials Processing	5
		Computer Skills Electives[1]	6
		Computation Skills Elective[3]	3-5
		Total	**14-16**

Fifth Quarter

LMLIB	220	Technical Services II: Cataloging	5
		Leadership Skills Elective[4]	3-5
		Other Electives of Student's Choice[5]	5-7
		Total	**13-17**

Sixth Quarter

LMLIB	222	Reference Services and Outreach	5
LMLIB	225	Supervised Work Experience	10
		Total	**15**

92-98 credits are required for an A.A.S. degree.

The following courses are approved electives.
Substitutions can be made with approval from instructor. Please consult the Library Technician instructor for online options for electives.

[1] *Computer Skills- 18 to 22 credits are required. 7-17 credits must come from Group A and 1-9 credits must come from Group B.*

Group A-Software and Internet Literacy

CAPPS	*102*	*Introduction to Office*	*1*
CAPPS	*104*	*Windows*	*1*
CAPPS	*110*	*Word*	*1-5*
CAPPS	*112*	*Excel*	*1-5*
CAPPS	*114*	*Access*	*1-5*
CAPPS	*116*	*PowerPoint*	*1-3*
CAPPS	*118*	*WordPerfect*	*1-5*

CAPPS	120	Outlook	1-3
GENST	108	Learning for the 21st Century	5
GENST	115	Internet Issues	2
IS	160	Internet Fundamentals	1

Group B-Hardware and IT Literacy

BT	100	Keyboarding for Computers OR	
BT	101	Keyboarding	1-5
BT	250	Information Technology	5
IS	120	Business Computer Use	3
IS	142	Hardware Fundamentals	3
IS	143	Operating System Fundamentals	2
IS	144	Programming Fundamentals	3

[2] Communication Skills (Choose two courses) (10-11 credits)

BT	231	Office Procedures	5
BT	272	Business Correspondence	5
ENG	101	English Composition OR	
BT	107	Business Communications AND	
BT	108	Business Communications	5-6
ENG	201	Advanced English Composition	5
ENG	205	Technical Writing	5

[3] Computation Skills (Choose one course) (3-5 credits)

ACCT	051	Basic Accounting Procedures	5
GBUS	102	Math Skills for Business	3
GBUS	103	Basic Business Math and Electronic Calculators	5
MATH	090	Pre-Algebra	5

[4] Leadership Skills/Human Relations (Choose one course) (3-5 credits)

GBUS	105	Principles of Leadership	3
GBUS	280	Human Relations in Business	5
HS	136	Improving Interpersonal Communication	5
MMGT	101	Principles of Management	5
MMGT	231	Human Resource Management	5

[5] Electives (Optional)

ED	202	Survey of Education	5
ED	204	Introduction to Special Education	5
LMLIB	224	Research Topics and Projects in Library Service	1-3
LMLIB	266	Cooperative Education Seminar	1-2
LMLIB	267	Cooperative Education Work Experience	1-8
		Or other computer skills electives	1-5

MACHINIST/CNC TECHNOLOGY

A.A.S. Degree, Certificate: SCC

The Machinist/CNC technology program is designed to provide students with the skills necessary to gain employment in the manufacturing industry. The first year of the program will focus on skills used in a modern machine shop: machine shop math, blueprint reading, and conventional machine tool theory and lab. The last year offers advanced conventional machining and specialized training in CNC theory and procedures and quality control.

Each required course for graduation must be completed with a grade of 2.0 or higher before proceeding to the next quarter.

FIRST YEAR

First Quarter

APLED	112	Applied Mathematics[1]	3
MACH	113	Beginning Blueprint	2
MACH	114	Introduction to Machine Shop I	5
MACH	115	Introduction to Machine Tools	5
MACH	116	Introduction to Machine Shop II	5
		Total	**20**

Second Quarter

CIS	105	Computer Fundamentals for Vocations I	2
ISFTY	111	Industrial First Aid	2
MACH	123	Machine Tool Operations I	6
MACH	124	Blueprint II	2
MACH	125	Machine Shop Math I	2
MACH	126	Machine Tool Operations II	7
		Total	**21**

Third Quarter

APLED	121	Applied Written Communication[1]	4
MACH	133	Machine Tool Operations III	7
MACH	134	Machine Shop Math II	2
MACH	135	Blueprint III	2
MACH	136	Machine Tool Operations IV	7
		Total	**22**

SECOND YEAR

Fourth Quarter

AGGEN	157	Arc Welding	1
APLED	123	Leadership Skills for Business and Industry[1]	3
MACH	244	Blueprint IV	2
MACH	247	CNC Theory	5
MACH	248	CNC Lab	7
MACH	262	CNC Programming	3
		Total	**21**

Fifth Quarter

APLED	125	Employment Preparation[1]	3
MACH	249	Quality Control	4
MACH	250	CNC Production Theory	5
MACH	251	CNC Production Lab	7
MACH	254	Blueprint V	2
		Total	**21**

Sixth Quarter

MACH	201	Manufacturing Economics	1
MACH	202	Manufacturing Resource Management	1
MACH	243	Machine Tool Operations V[2]	8
MACH	246	Machine Tool Operations VI[2]	5
		Total	**15**

120 credits are required for an A.A.S. degree.

Machinist Certificate

This four-quarter evening machinist certificate program prepares students for employment in the machining industry. Basic manual machine operation with emphasis on the safe operation of a variety of machine tools is an integral component of this program. Students receive intensive training in both theory and application of machining skills.

First Quarter

MACH	113	Beginning Blueprint	2
MACH	114	Introduction to Machine Shop I	5
MACH	116	Introduction to Machine Shop II	5
		Total	**12**

Second Quarter

APLED	121	Applied Written Communication[1]	4
MACH	123	Machine Tool Operations I	6
MACH	124	Blueprint II	2
		Total	**12**

Third Quarter

APLED	112	Applied Mathematics[1]	3
MACH	126	Machine Tool Operations II	7
MACH	135	Blueprint III	2
		Total	**12**

Fourth Quarter

MACH	133	Machine Tool Operations III[2]	7
MACH	136	Machine Tool Operations IV[2]	7
		Total	**14**

50 credits are required for a machinist certificate.

[1] This related education requirement may be met by any course or combination of courses approved by the department dean.

[2] This course may be substituted with MACH 266 and 267 or 288 (no seminar).

CNC Certificate[1]

This four-quarter CNC certificate evening program is designed for people currently in the machining industry or those who have completed the machinist certificate program. CNC theory, CNC programming and CNC application are integral elements of the program. Students must have the machinist certificate before obtaining a CNC certificate. Individual courses may be taken with permission of the instructor.

First Quarter

CIS	105	Computer Fundamentals for Vocations I[2]	5
MACH	244	Blueprint IV	2
MACH	247	CNC Theory	5
		Total	**12**

Second Quarter

MACH	248	CNC Lab	7
MACH	250	CNC Production Theory	5
		Total	**12**

Third Quarter

APLED	123	Leaderships Skills for Business and Industry[3]	3
APLED	125	Employment Preparation[1]	3
MACH	251	CNC Production Lab	7
		Total	**13**

Fourth Quarter

MACH	243	Machine Tool Operations V[4]	8
MACH	262	CNC Programming[4]	6
		Total	**14**

51 credits are required for a CNC certificate.

[1] *The Machinist Certificate is required before students can obtain the CNC certificate due to related education requirements. Individual courses may be taken with permission of instructor.*

[2] *This course may be substituted with CIS 110.*

[3] *This course may be substituted with any related course or a combination of courses approved by the instructional dean.*

[4] *This course may be substituted with MACH 266 and 267 or 288 (no seminar).*

MANAGEMENT

A.A.S. Degree, Certificate: SCC, SFCC

The challenge of management! It takes a special kind of person with a special knack to be a good business manager. Over 60 percent of the workforce in Spokane is employed in a distributive occupation. This creates a big demand for persons with training as middle managers or junior executives.

The management programs at SCC and SFCC are designed to give an individual on-the-job work experience while learning the basic principles of business management. Students are given credit for approved work experience.

Courses in the program include management, marketing, salesmanship, advertising and human relations. In addition to the academic courses, there is opportunity for team work and leadership experience through participation in Delta Epsilon Chi, an affiliate of Distributive Education Clubs of America. All of the students graduating from this program must have a minimum grade of 2.0 on each of the Management, Accounting, Economics and General Business required courses at SCC only. Students must also have a 2.0 cumulative minimum grade point average on all required courses in the program at SCC only.

A.A.S. Degree-SCC Outline

Basic Business Core

ACCT	151	College Accounting I or equivalent[1]	5
CIS	110	Introduction to Computer Applications[2]	5
ECON	100	Fundamentals of Economics or higher	5
ENG	101	English Composition	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication OR	
SPCH	201	Speech for Business and Professions	3-5
ENG	201	Advanced English Composition OR	
ENG	205	Technical Writing OR	
BT	272	Business Correspondence[3]	5
GBUS	101	Introduction to Business	5

GBUS	104	Business Mathematics[4]	5
GBUS	280	Human Relations in Business	5
MMGT	100	Supervised Volunteer Experience	1
MMGT	101	Principles of Management	5
		Total	**49-51**

Management Option Requirements

CATT	241	Project Management Applications	2.5
GBUS	205	Business Law	5
MMGT	211	Marketing	5
MMGT	231	Human Resource Management	5
MMGT	242	Project Management	2.5
MMGT	266	Cooperative Education Seminar	3
MMGT	267	Cooperative Education Work Experience OR	
MMGT	288	Cooperative Education Work Experience (No Seminar)	9
		Total	**32**

RECOMMENDED BUSINESS ELECTIVES: (CHOOSE FROM THE FOLLOWING LIST)[5]

ACCT	152	College Accounting II	5
ECON	201	Introduction to Macroeconomics	5
ECON	202	Introduction to Microeconomics	5
GBUS	100	Money Management	3
GBUS	107	Introduction to Electronic Calculators	1
GBUS	120	International Business	5
GBUS	204	Introduction to Law	5
GBUS	217	Business Statistics	5
MMGT	181	Leadership Training-DEC OR	
MMGT	182	Leadership Training-DEC OR	
MMGT	183	Leadership Training-DEC OR	
MMGT	191	Leadership Training-DEC OR	
MMGT	192	Leadership Training-DEC OR	
MMGT	193	Leadership Training-DEC	1
MMGT	205	Small Business Planning	5
MMGT	212	Retailing	5
MMGT	218	Fundamentals of Advertising	5
MMGT	245	Introduction to Consulting	2
		General Elective	5
		Total	**9**

90-92 credits are required for an A.A.S. degree.

Certificate

First Quarter

GBUS	101	Introduction to Business	5
GBUS	103	Basic Business Math and Electronic Calculators	5
MMGT	266	Cooperative Education Seminar[6]	1-2
		Electives Group A, B, or C	5
		Total	**16-17**

Second Quarter

ACCT	151	College Accounting I or equivalent	5
CIS	110	Introduction to Computer Applications[2]	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
MMGT	266	Cooperative Education Seminar[6]	1-2
		Total	**16-17**

Third Quarter

BT	101	Keyboarding OR	
		Business Elective	3-5
BT	272	Business Correspondence[3] OR	
ENG	101	English Composition	5
MMGT	101	Principles of Management	5
MMGT	266	Cooperative Education Seminar[6]	1-2
		Electives Group A, B, or C	5
		Total	**19-22**

51-56 credits are required for a certificate.

GROUP A-MARKETING:

CATT	241	Project Management Applications	2.5
MMGT	211	Marketing	5
MMGT	218	Fundamentals of Advertising	5
MMGT	242	Project Management	2.5

GROUP B-MANAGEMENT:

BT	260	Administrative Office Management	5
CATT	120	Microsoft Word I	2
GBUS	205	Business Law	5
MMGT	205	Small Business Planning	5
MMGT	231	Human Resource Management	5

GROUP C-FINANCE:

ACCT	152	College Accounting II	5
GBUS	100	Money Management	3
GBUS	217	Business Statistics	5

[1] *ACCT 101 may be taken in place of ACCT 151.*
[2] *Keyboarding skills are required.*
[3] *BT 109 is a prerequisite.*
[4] *GBUS 103 or proficiency test is required.*
[5] *Other business courses may be selected with approval of the department adviser.*
[6] *Additional credits can be earned by concurrent enrollment in a work experience position for 1 credit or in an approved cooperative education work experience position for 3 credits when enrolled in a mid-management seminar. Students will be allowed to take either cooperative education seminar and/or supervised volunteer experience.*

A.A.S. Degree-SFCC Program Outline

FIRST YEAR

First Quarter

BT	107	Business Communications[1]	3
GBUS	101	Introduction to Business	5
GBUS	103	Basic Business Math and Electronic Calculators[2]	5
MMGT	181	Leadership Training-DEC[3]	1
		Computer Elective (Information Systems)	1
		Total	**15**

Second Quarter

ACCT	101	Principles of Accounting[4]	5
BT	108	Business Communications[1]	3
GBUS	108	eBusiness	2
MMGT	111	Mid-Management Seminar OR	
MMGT	112	Mid-Management Seminar OR	
MMGT	113	Mid-Management Seminar OR	
MMGT	267	Cooperative Education Work Experience	2
MMGT	182	Leadership Training-DEC[3]	1
		Computer Elective (Information Systems)	1
		Total	**14**

Third Quarter

BT	272	Business Correspondence	5
GBUS	280	Human Relations in Business	5
MMGT	101	Principles of Management	5
MMGT	183	Leadership Training-DEC[3]	1
		Total	**16**

SECOND YEAR

Fourth Quarter

ECON	100	Fundamentals of Economics	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
GBUS	205	Business Law	5
		Total	**15**

Fifth Quarter

CRMGT	140	Financial Statement Analysis	3
MMGT	223	Customer Service	3
MMGT	231	Human Resource Management	5
		Computer Elective (Information Systems)	1
		Business Electives	3
		Total	**15**

Sixth Quarter

CRMGT	110	Introduction to Finance	3
MMGT	211	Marketing	5
		Business Electives	7
		Total	**15**

90 credits are required for an A.A.S. degree.

Keyboarding proficiency of 35 wpm expected.

[1] *May substitute ENG 101 for BT 107 and 108.*
[2] *May substitute GBUS 217.*
[3] *May substitute GBUS 105 for MMGT 181, 182, 183.*
[4] *May substitute ACCT 103 and 104.*

Certificate

First Quarter

GBUS	101	Introduction to Business	5
GBUS	103	Basic Business Math and Electronic Calculators	5
MMGT	111	Mid-Management Seminar	1
		Elective Group D	1
		Elective Group A, B or C	5
		Total	**17**

Second Quarter

ACCT	101	Principles of Accounting[1]	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
GBUS	108	eBusiness	2
MMGT	112	Mid-Management Seminar	1
		Electives Group A, B or C	4
		Total	**17**

Third Quarter

BT	272	Business Correspondence	5
MMGT	101	Principles of Management	5
		Elective Group A, B or C	5
		Elective Group D	1
		Total	**16**

50 credits are required for a certificate.

CERTIFICATE ELECTIVES MAY BE CHOSEN FROM:

GROUP A-MARKETING:

FMDSE	150	Principles of Retail Merchandising	5
FMDSE	224	Principles of Retail Promotion	5
MMGT	211	Marketing	5
MMGT	218	Fundamentals of Advertising	5
MMGT	220	Professional Sales	3

GROUP B-MANAGEMENT

BT	255	Business Productivity Tools	3
BT	260	Administrative Office Management	5
GBUS	280	Human Relations in Business	5
MMGT	231	Human Resource Management	5
SBM	101	How to Start a Small Business	5

GROUP C-FINANCE:

CRMGT	110	Introduction to Finance	3
CRMGT	150	Introduction to Investments	2
GBUS	100	Money Management	3

GROUP D-COMPUTER ELECTIVES:

CAPPS	102	Introduction to Office	1
CAPPS	110	Word	1
CAPSS	112	Excel	1
CAPPS	114	Access	1
CAPPS	116	PowerPoint	1

[1] *ACCT 103 and 104 may substitute for ACCT 101.*

MANICURIST

Certificate: SCC

Students enrolling in the manicuring certificate program will receive training in all aspects of nail care. Areas of emphasis include the application and removal of artificial nails and nail tips; various manicure and pedicure treatments; hand and feet massage techniques; and all safety and sanitation measures involved with these processes. Upon successful completion of the coursework, the student will be prepared to take the Washington State Examination in Manicuring.

First Quarter

COS	113	Manicuring Concepts I	4
COS	114	Manicuring Applications I	10
COS	119	Advanced Manicuring Concepts	1
ISFTY	111	Industrial First Aid	2
		Total	**17**

Second Quarter

COS 115 Manicuring Concepts II. 4
COS 116 Manicuring Applications II 10
COS 129 Advanced Manicuring Applications 2
        Total 16

33 credits are required for a certificate.

MANUFACTURING TECHNOLOGY

A.A.S. Degree: SCC

The manufacturing technology program prepares students to transfer to Eastern Washington University's mechanical engineering technology program or to work in large and small manufacturing firms.

Students learn the design and manufacturing processes required for a product to be developed from initial concept to final production. Students not only learn to draft using CAD techniques, but also get "hands-on" practical experience by learning fabrication processes used in industry. Coursework includes shop practice techniques of welding, machining, shop safety and assembly techniques. The course of study includes such basic disciplines of engineering technology as math, physics, statics, strength of materials and materials science.

FIRST YEAR

First Quarter

APLED 121 Applied Written Communication[1] 4
MET 105 Basic Blueprint Reading. 3
MET 113 Computer Fundamentals for Engineering. 5
MET 114 Technical Engineering Graphics I. 5
MET 115 Basic Mathematics I 3
        Total 20

Second Quarter

APLED 123 Leadership Skills for Business and Industry[1] 3
MET 123 Technical Mathematics I. 5
MET 124 Technical Engineering Graphics II 4
MET 127 Manufacturing Processes 3
MET 129 Computer Aided Design Fundamentals 5
        Total 20

Third Quarter

APLED 125 Employment Preparation[1] 3
MET 132 Technical Engineering Graphics III 5
MET 133 Introductory Applied Physics[2] 3
MET 137 Technical Mathematics II. 5
MET 139 Hydraulics/Pneumatics[2] 3
        Total 19

SECOND YEAR

Fourth Quarter

MET 241 3D CAD/Descriptive Geometry 3
MET 242 Engineering Design Fundamentals 5
MET 244 Tolerancing Systems 3
MET 245 Applied Physics[2]. 5
MET 247 Shop Practices 2
        Total 18

Fifth Quarter

MET 250 Strength of Materials 3
MET 252 Advanced CAD. 5
MET 253 Materials Science 2
MET 254 Statics 5
        Approved Elective 5
        Total 20

Sixth Quarter

MET 261 Project Design 5
MET 262 Electrical Theory for Engineering 5
MET 263 Machine Controls 2
        Approved Elective 5
        Total 17

114 are credits required for an A.A.S. degree.

APPROVED ELECTIVES:

Choose a maximum of one from each group or all math or all physics series for a maximum of 15 credits.

HUMAN 101 Introduction to Humanities 5
MATH 111 Pre-Calculus I. 5
MATH 202 Survey of Calculus 5
PHIL 101 Introduction to Philosophy 5
PHIL 201 Introduction to Logic. 5
PHIL 210 Ethics. 5
PHYS 101 General Physics 5
PHYS 102 General Physics 5
PHYS 103 General Physics 5
SOC 101 Introduction to Sociology 5
SOC 221 Race and Ethnic Relations. 5
SPCH 121 Job Communication Skills. 5
SPCH 127 Leadership Development 5

For the manufacturing technology degree, all electives must be approved by a mechanical engineering technology instructor.

[1] This related education requirement may be met by any course or combination of courses approved by the instructional dean.

[2] May be substituted with approved elective with permission of MET instructor.

MARKETING

A.A.S. Degree: SCC, SFCC

The marketing program is designed for students who want to special-ize in fields involved with the distribution of goods and services from producer to consumer. Students take core business courses followed by marketing specialty courses such as marketing, retailing, advertis-ing and project management. Students are also required to gain work experience as part of the program. There is opportunity for teamwork and leadership experience through participation in Delta Epsilon Chi, an affiliate of Distributive Education Clubs of America. All students graduating from this program must have a minimum grade of 2.0 on each of the Management; Accounting; Economics; and General Business required courses at SCC only. Students must also have a 2.0 cumulative minimum grade point average on all required courses in the program at SCC only.

A.A.S. Degree-SCC Outline

Basic Business Core

ACCT 151 College Accounting I or equivalent[1] 5
CIS 110 Introduction to Computer Applications[3] 5
ECON 100 Fundamentals of Economics or higher 5
ENG 101 English Composition 5
ENG 109 Speech Composition AND
SPCH 101 Introduction to Speech Communication OR
SPCH 201 Speech for Business and Professions 3-5
ENG 201 Advanced English Composition OR
ENG 205 Technical Writing OR
BT 272 Business Correspondence[2] 5
GBUS 101 Introduction to Business 5
GBUS 104 Business Mathematics[4] 5
GBUS 280 Human Relations in Business 5
MMGT 100 Supervised Volunteer Experience 1
MMGT 101 Principles of Management 5
        Total 49-51

Marketing Option Requirements

CATT 241 Project Management Applications 2.5
GBUS 205 Business Law 5
MMGT 211 Marketing 5
MMGT 212 Retailing 5
MMGT 218 Fundamentals of Advertising 5
MMGT 242 Project Management 2.5
MMGT 266 Cooperative Education Seminar 3
MMGT 267 Cooperative Education Work Experience OR
MMGT 288 Cooperative Education Work Experience (No Seminar) 9
        Total 37

RECOMMENDED BUSINESS ELECTIVES: (CHOOSE FROM THE FOLLOWING LIST)⁵

GBUS	100	Money Management	3
GBUS	120	International Business	5
GBUS	204	Introduction to Law	5
MMGT	181	Leadership Training-DEC OR	
MMGT	182	Leadership Training-DEC OR	
MMGT	183	Leadership Training-DEC OR	
MMGT	191	Leadership Training-DEC OR	
MMGT	192	Leadership Training-DEC OR	
MMGT	193	Leadership Training-DEC	1
		General Elective	5
		Total	**4**

90-92 credits are required for an A.A.S. degree.

¹ ACCT 101 may be taken in place of ACCT 151.
² BT 109 is a prerequisite.
³ Keyboarding skills required.
⁴ GBUS 103 or proficiency test is required.
⁵ Other business courses may be selected with approval of the department adviser.

A.A.S. Degree-SFCC Program Outline

FIRST YEAR

First Quarter

ACCT	101	Principles of Accounting¹	5
BT	107	Business Communications².	3
GBUS	101	Introduction to Business	5
GBUS	108	e-Business	2
		Computer Elective (Information Systems)	1
		Total	**16**

Second Quarter

BT	108	Business Communications².	3
CRMGT	140	Financial Statement Analysis	3
GBUS	103	Basic Business Math and Electronic Calculators OR	
GBUS	217	Business Statistics	5
GBUS	205	Business Law	5
MMGT	111	Mid-Management Seminar OR	
MMGT	112	Mid-Management Seminar OR	
MMGT	113	Mid-Management Seminar OR	
MMGT	267	Cooperative Education Work Experience	2
		Total	**18**

Third Quarter

BT	272	Business Correspondence	5
CRMGT	110	Introduction to Finance	3
GBUS	280	Human Relations in Business³	5
MMGT	211	Marketing	5
		Total	**18**

SECOND YEAR

Fourth Quarter

ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
FMDSE	150	Principles of Retail Merchandising	5
FMDSE	224	Principles of Retail Promotion	5
		Total	**15**

Fifth Quarter

ECON	100	Fundamentals of Economics⁴	5
GBUS	140	International Marketing	3
MMGT	181	Leadership Training-DEC⁵ OR	
MMGT	182	Leadership Training-DEC⁵ OR	
MMGT	183	Leadership Training-DEC⁵	3
MMGT	220	Professional Sales	3
		Total	**14**

Sixth Quarter

MMGT	101	Principles of Management	5
MMGT	223	Customer Service	3
		Computer Electives (Information Systems)	2
		Total	**10**

91 credits are required for an A.A.S. degree.

Keyboarding proficiency of 35 WPM required.

¹ May substitute ACCT 103 AND ACCT 104.
² May substitute ENG 101 for BT 107 AND 108.
³ May substitute HS 136.
⁴ May substitute ECON 201.
⁵ May substitute GBUS 105 for MMGT 181, 182, 183.

MASSAGE THERAPY

A.A.S. Degree, Certificate: SCC

Massage therapists provide relief and improved health and well-being to clients through the application of manual techniques for manipulating skin, muscles and connective tissues.

Massage safety, client counseling, practice management, applicable regulations and professional standards and ethics are presented.

Students must earn a grade of 2.0 or higher in each class in order to proceed to the next quarter.

The massage program begins in summer quarter.

Program Prerequisites:

■ Washington State Patrol Background Check
■ Ability to lift 50 pounds
■ Computer literacy or CIS 110
■ Appropriate scores in one of the following tests: ASSET or Compass

Admission Prerequisites:

Any transfer courses must be from accredited educational institutions, and must have been taken within the last five years, with a grade of 2.0 or better.

FIRST YEAR

First Quarter

GBUS	102	Math Skills for Business	3
HED	108	Human Anatomy	5
MASS	110	Introduction to Massage Therapy	6
		Total	**14**

Second Quarter

HED	125	Medical Terminology	5
ISFTY	111	Industrial First Aid	2
MASS	120	Massage Technique I	4
MASS	122	Body Mechanics I	1
MASS	124	Kinesiology I	2
MASS	126	Hydrotherapy I	1
SPCH	102	Interpersonal Communication	5
SURG	105	Blood-borne Pathogens and HIV/AIDS	1
		Total	**21**

Third Quarter

ENG	101	English Composition	5
HED	109	Human Physiology and Disease	5
HED	132	Ethics and Professionalism in Health	2
MASS	130	Massage Technique II	3
MASS	132	Body Mechanics II	1
MASS	134	Kinesiology II	2
MASS	136	Hydrotherapy II	1
MASS	138	Student Clinic I	1
		Total	**20**

Fourth Quarter

MASS	140	Massage Technique III	3
MASS	142	Anatomy/Physiology/Pathology	5
MASS	144	Business Practices for the Massage Therapist	5
MASS	146	Seminar	1
MASS	148	Student Clinic II	2
		Total	**16**

71 credits are required for a certificate.

A.A.S. Degree Option

BIOL	101	General Biology	5
CHEM	161	General Chemistry for Health Sciences	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5

PSYCH	101	Introduction to Psychology	5
SOC	101	Introduction to Sociology	5
		Math/Science Elective	5
		Communications OR	
		Humanities Electives	10
		Social Science Elective	5
		Total	**45**

116 credits are required for an AAS degree and 71 credits are required for a certificate.

Note: All electives must be numbered 100 or above.

MECHANICAL ENGINEERING TECHNOLOGY

A.A.S. Degree: SCC

The mechanical engineering technology program prepares students for mechanical drafting and design using both CAD drafting and Solid Modeling techniques. The course of study prepares students to work in engineering teams for large and small manufacturing firms, consultant engineering firms, testing and research companies. Students with this degree may also transfer to Eastern Washington University's mechanical engineering technology B.A. degree program.

Students learn the design and manufacturing processes required for a product to be developed from initial concept to final production. Students not only learn to draft using CAD and Solid Modeling techniques, but also get "hands-on" practical experience in Rapid Prototyping, live design projects, engineering competitions, and by learning fabrication processes used in industry. Coursework includes shop practice techniques, shop safety as well as design and assembly techniques. The course of study includes such basic disciplines of engineering technology as math, physics, statics, and materials science.

FIRST YEAR

First Quarter

APLED	112	Applied Mathematics[1,2]	5
APLED	121	Applied Written Communication[1]	4
MET	101	Introduction to Engineering	2
MET	105	Basic Blueprint Reading	3
MET	114	Engineering Graphics 1	4
		Total	**18**

Second Quarter

APLED	123	Leadership Skills for Business and Industry[1]	3
MET	123	Applied Technical Mathematics[3]	5
MET	124	Engineering Graphics 2	5
MET	127	Manufacturing Processes	3
MET	129	Computer Aided Drafting	5
		Total	**21**

Third Quarter

APLED	125	Employment Preparation[1]	3
MET	132	Engineering Graphics 3	5
MET	133	Introductory Applied Physics[4]	3
MET	137	Applied Technical Mathematics II[3]	5
MET	139	Hydraulics/Pneumatics[4]	3
		Total	**19**

SECOND YEAR

Fourth Quarter

MET	241	CAD Solid Modeling	5
MET	242	Mechanical Design Fundamentals	4
MET	244	Tolerancing Systems	3
MET	245	Applied Physics[4]	5
MET	247	Shop Practices	2
		Total	**19**

Fifth Quarter

MET	250	Strength of Materials	3
MET	252	Advanced CAD	5
MET	253	Materials Science	2
MET	254	Statics	5

MET	255	Technical Applications I[4]	4
		Total	**19**

Sixth Quarter

MET	135	Schematics	3
MET	261	Project Design	5
MET	262	Electrical Theory for Engineering	5
MET	263	Machine Controls	2
MET	264	Technical Applications II[4]	4
		Total	**19**

115 credits are required for an A.A.S. degree.

[1] This related education requirement may be met by any course or combination of courses approved by the instructional dean.

[2] This course may be substituted with MET 115 if approved by the division dean.

[3] This course may be substituted with MATH 100 if offered with permission of the division dean.

[4] This course may be substituted with MET 266 and 267 or MET 288. Also, may be substituted for approved electives for students wanting to transfer to EWU's mechanical engineering technology B.A. degree.

MEDICAL ASSISTANT

A.A.S. Degree, Certificate: SCC

The medical assistant is an allied health professional who assists physicians and other health care providers in their offices or other medical settings. In accordance with respective state laws, they perform a broad range of administrative and clinical duties. In the medical assisting program at Spokane Community College, students learn about the administrative duties of scheduling and receiving patients, preparing and maintaining medical records, performing basic secretarial skills and medical transcription, handling telephone calls, writing correspondence, serving as a liaison between the physician and other individuals, and managing practice finances. The clinical phase of the program is taught through intense training and hands-on application. Students learn to perform clinical duties including asepsis and infection control, taking patient histories and vital signs, first aid and CPR, preparing patients for procedures, assisting the physician with examinations and treatments, collecting and processing specimens, performing selected diagnostic tests, and preparing and administering medications as directed by the physician.

Admission Requirements:

- Computer Skills
- CIS 110 or equivalent
- Appropriate scores in one of the following: ASSET or Compass

FIRST YEAR

First Quarter

GBUS	102	Math Skills for Business	3
HED	108	Human Anatomy	5
MA	101	Administrative Medical Assistant I	5
MA	102	Clinical Medical Assistant I	3
		Total	**16**

Second Quarter

ENG	101	English Composition	5
HED	125	Medical Terminology	5
MA	111	Administrative Medical Assistant II	3
MA	112	Clinical Medical Assistant II	5
		Total	**18**

Third Quarter

HED	109	Human Physiology and Disease	5
MA	120	Medical Assistant Coding and Reimbursement	3-5
MA	122	Clinical Medical Assistant III	5
MA	125	Ambulatory Care Setting Pharmacology	5
		Total	**18–20**

Fourth Quarter

MA	131	Practice Finances and Management. 3
MA	132	Clinical Medical Assistant IV 5
MA	141	Medical Assistant Seminar 1
MA	142	Medical Assistant Externship 6
		Total 15

SECOND YEAR

Fifth Quarter[1]

MMGT	101	Principles of Management 5
PSYCH	101	Introduction to Psychology. 5
SOC	101	Introduction to Sociology OR
SOC	240	Social Problems 5
		Total 15

Sixth Quarter[1]

ENG	201	Advanced English Composition 5
GBUS	280	Human Relations in Business 5
SPCH	220	Intercultural Communication 5
		Total 15

Seventh Quarter[1]

ACCT	101	Principles of Accounting 5
PSYCH	210	Developmental Psychology. 5
SPCH	102	Interpersonal Communication 5
		Total 15

Certificate

First Quarter

GBUS	102	Math Skills for Business 3
HED	108	Human Anatomy 5
MA	101	Administrative Medical Assistant I. 5
MA	102	Clinical Medical Assistant I 3
		Total 16

Second Quarter

ENG	101	English Composition 5
HED	125	Medical Terminology 5
MA	111	Administrative Medical Assistant II 3
MA	112	Clinical Medical Assistant II 5
		Total 18

Third Quarter

HED	109	Human Physiology and Disease. 5
MA	120	Medical Assistant Coding and Reimbursement 3-5
MA	122	Clinical Medical Assistant III. 5
MA	125	Ambulatory Care Setting Pharmacology 5
		Total 18–20

Fourth Quarter

MA	131	Practice Finances and Management. 3
MA	132	Clinical Medical Assistant IV 5
MA	141	Medical Assistant Seminar 1
MA	142	Medical Assistant Externship 6
		Total 15

A minimum of 112 credits are required for an A.A.S. degree and a minimum of 67 credits are required for a certificate.

Liberal Arts Curriculum (Optional A.A.S. Degree)

A 2.0 grade or better is needed in all required classes before proceeding to the next quarter and before a certificate is awarded.

The student may complete requirements in medical assisting and receive a certificate or complete the professional requirements plus liberal arts requirements and receive an associate in applied science degree.

The student may enroll in liberal arts either preceding or following the professional curriculum.

[1] Departmentally approved electives numbered 100 or above may be substituted for courses required for the A.A.S. degree.

MEDICAL OFFICE BILLLING AND CODING SPECIALIST

Certificate: SCC

This program prepares individuals for employment in medical offices as medical office receptionists, coders and insurance billers. Spokane is a major regional center for medical care offering maximum opportunities for employment. Positions are plentiful in medical clinics, medical insurance companies and private physicians' offices.

Admission Requirements:

Keyboarding skills: 30 wpm with six or fewer errors completed at the SCC testing center or enrollment in BT 101 or 102, current first aid/CPR card or successful completion of ISFTY 111 or equivalent. Students with ASSET scores below 30 or Compass test scores below 43 must successfully complete BT 151 during the first quarter.

FIRST YEAR

First Quarter

BT	090	Basic Grammar for Business II 5
MSEC	101	Medical Terminology and Anatomy 5
MSEC	108	Medical Office Computing 5
		Total 15

Second Quarter

ACCT	151	College Accounting I 5
BT	231	Office Procedures[1] 5
MSEC	102	Medical Terminology and Anatomy[2] 5
		Total 15

Third Quarter

GBUS	103	Basic Business Math and Electronic Calculators 5
MSEC	121	Medical Office Reception[3]. 5
MSEC	123	Medical Office Coding[4] 5
		Total 15

SECOND YEAR

Fourth Quarter

MSEC	124	Medical Office Insurance Billing[5] 5
MSEC	125	Medical Office Bookkeeping[6] 5
MSEC	223	Medical Office Coding II[7] 5
		Total 15

Fifth Quarter

BT	160	Job Preparation Techniques. 3
MSEC	120	Human Relations/Communications for Medical Office Personnel 5
MSEC	284	Medical Internship Seminar 1
MSEC	285	Medical Office Reception Internship[8] 2
MSEC	286	Medical Insurance Billing Internship[8] 2
		Total 13

73 credits are required for a certificate.

Students must complete all classes with a 2.0 grade or higher.

[1] BT 090, keyboarding proficiency.
[2] MSEC 101.
[3] BT 231or concurrent enrollment with BT 231.
[4] MSEC 101, 102, or concurrent enrollment with 102.
[5] Concurrent enrollment with MSEC 125.
[6] ACCT 151, GBUS 103, and concurrent enrollment with MSEC 124.
[7] MSEC 123.
[8] All of the courses listed above must be completed before enrolling in an internship. Cooperative Education courses may be substituted.

MEDICAL OFFICE RECEPTIONIST

Certificate: SCC

This program prepares individuals for employment in medical offices as medical office receptionists. Spokane is a major regional center for medical care offering maximum opportunities for employment. Positions are plentiful in medical clinics, medical insurance companies and private physicians' offices.

Admission Requirements:

Keyboarding skills: 30 wpm with six or fewer errors completed at the SCC testing center or enrollment in BT 101 or 102, current first aid/CPR card or successful completion of ISFTY 111 or equivalent. Students with ASSET scores below 30 or Compass test scores below 43 must successfully complete BT 151 during the first quarter.

First Quarter

BT	090	Basic Grammar for Business II	5
MSEC	101	Medical Terminology and Anatomy	5
MSEC	108	Medical Office Computing	5
		Total	**15**

Second Quarter

BT	231	Office Procedures[1]	5
MSEC	102	Medical Terminology and Anatomy[2]	5
MSEC	121	Medical Office Reception[3]	5
		Total	**15**

Third Quarter

BT	160	Job Preparation Techniques	3
MSEC	120	Human Relations/Communications for Medical Office Personnel	5
MSEC	284	Medical Internship Seminar	1
MSEC	285	Medical Office Reception Internship[4]	3
		Total	**12**

42 credits are required for a certificate.

Students must complete all classes with a 2.0 grade or higher.

[1] *BT 090, keyboarding proficiency*

[2] *MSEC 101*

[3] *BT 231 or concurrent with BT 231*

[4] *All of the courses listed above must be completed before enrolling in an internship. Cooperative Education may be substituted.*

MEDICAL OFFICE SPECIALIST

A.A.S. Degree: SCC

This program prepares individuals for employment in medical offices. Spokane is a major regional center for medical care offering maximum opportunities for employment. Positions are plentiful in medical clinics, medical insurance companies and private physicians' offices.

Admission Requirements:

Keyboarding skills: 30 wpm with six or fewer errors completed at the SCC testing center or enrollment in BT 101 or 102, current first aid/CPR card or successful completion of ISFTY 111 or equivalent. Students with ASSET scores below 30 or Compass test scores below 43 must successfully complete BT 151 during the first quarter.

FIRST YEAR

First Quarter

BT	090	Basic Grammar for Business II	5
MSEC	101	Medical Terminology and Anatomy	5
MSEC	108	Medical Office Computing	5
		Total	**15**

Second Quarter

ACCT	151	College Accounting I	5
BT	102	Document Processing	5
MSEC	102	Medical Terminology and Anatomy[1]	5
		Total	**15**

Third Quarter

BT	231	Office Procedures[2]	5
GBUS	103	Basic Business Math and Electronic Calculators	5
MSEC	120	Human Relations/Communications for Medical Office Personnel	5
MSEC	123	Medical Office Coding[3]	5
		Total	**20**

SECOND YEAR

Fourth Quarter

MSEC	121	Medical Office Reception[4]	5
MSEC	223	Medical Office Coding II[5]	5
MSEC	240	Medical Office Transcription[6]	5
		Total	**15**

Fifth Quarter

BT	160	Job Preparation Techniques	3
MSEC	124	Medical Office Insurance Billing[7]	5
MSEC	125	Medical Office Bookkeeping[8]	5
MSEC	241	Medical Office Transcription[9]	5
		Total	**18**

Sixth Quarter

BT	260	Administrative Office Management	5
MSEC	180	Basic Medical Assisting	5
MSEC	284	Medical Internship Seminar	1
MSEC	285	Medical Office Reception Internship[10]	2
MSEC	287	Medical Specialist Internship[10]	2
		Total	**15**

98 credits are required for an A.A.S. degree.

Students must complete all classes with a 2.0 grade or higher.

[1] *MSEC 101.*

[2] *BT 090, keyboarding proficiency.*

[3] *MSEC 101, 102 or concurrent enrollment with 102.*

[4] *BT 231 or concurrent with BT 231.*

[5] *MSEC 123.*

[6] *Typing test 40 wpm.*

[7] *Concurrent enrollment with MSEC 125.*

[8] *ACCT 151, GBUS 103 and concurrent enrollment with MSEC 124.*

[9] *MSEC 240.*

[10] *All of the courses listed above must be completed before enrolling in an internship. Cooperative Education may be substituted.*

MEDICAL TRANSCRIPTION

Certificate: SCC

This educational program in medical transcription prepares the student for entry-level employment as a medical transcriptionist. This program provides the basic knowledge, understanding and skills required to transcribe medical dictation with accuracy, clarity and timeliness, applying the principles of professional and ethical conduct. The final quarter offers practical application of medical transcription in a hospital, clinic or medical transcription service environment.

First Quarter

BT	090	Basic Grammar for Business II OR	
BT	109	Business Communications	5
ENG	153	Vocabulary Development	5
MSEC	101	Medical Terminology and Anatomy	5
MSEC	190	Fundamentals of Medical Word Processing	4
		Total	**19**

Second Quarter

MSEC	102	Medical Terminology and Anatomy	5
MSEC	146	Medical Transcription I	10
SPCH	102	Interpersonal Communication OR	
SPCH	201	Speech for Business and Professions	3-5
		Total	**18-20**

Third Quarter

GBUS	103	Basic Business Math and Electronic Calculators	5
MSEC	103	Disease Processes	5
MSEC	147	Medical Transcription II	10
		Total	**20**

Fourth Quarter

BT	160	Job Preparation Techniques	3
MSEC	150	Medical Transcription Practicum	8
MSEC	284	Medical Internship Seminar	1
		Total	**12**

69-71 credits are required for a certificate.

Students must achieve at least a 2.0 grade point in all courses.

MULTI-OCCUPATIONAL TRADES

A.A.S. Degree: SCC

The primary function of the multi-occupational trade apprenticeship program is to train and produce journey-level workers who meet the stringent requirements of each individual trade. This is accomplished through a combination of technical skills obtained in an approved apprenticeship program (a minimum of 6,000 clock hours), the theory and practical applications learned in apprenticeship-related courses (450 clock hours), and instruction received in related education and elective courses.

Related Education[1]

APLED	112	Applied Mathematics	3-4
APLED	121	Applied Written Communication	4
APLED	123	Leadership Skills for Business and Industry	3-4
APLED	125	Employment Preparation	3
		Total	**13-15**

ELECTIVES[2]

CIS	110	Introduction to Computer Applications	5
MMGT	205	Small Business Planning	5
		Total	**10**

23-25 credits are required for an A.A.S. degree.

This program is open only to apprentices enrolled in a local JATC-approved apprenticeship training program. Verification of completion of an apprenticeship program by the JATC is required before submission of the petition for graduation. The combined total of 23-25 program credits, 6000 OJT hours, and 450 hours of related training meet the 30-hour residency requirements of A.A.S. degree candidates.

[1] *These related education requirements may be met by any course or combination of courses approved for substitution by the instructional dean.*

[2] *These are recommended electives. Substitutions must be approved by the JATC.*

NATURAL RESOURCES

A.A.S. Degree: SCC

FORESTRY

PARKS AND RECREATION

SOILS

WILDLIFE/FISHERIES

The associate in applied science degree in natural resources prepares students to work in one of four resource areas: forestry, parks and recreation, soils or wildlife/fisheries. The forestry option is recognized by the Society of American Foresters.

Students must obtain a minimum ASSET score of 108 with a writing score of at least 37 to enter the program.

FIRST YEAR: ALL OPTIONS

First Quarter

ENVSC	110	Plant Biology	5
NATRS	112	Natural Resources Mathematical Applications	5
NATRS	120	Basic Computer Applications in Natural Resources OR	
CIS	105	Computer Fundamentals for Vocations I	2
NATRS	202	Dendrology	5
NATRS	225	Natural Resources Occupational Experience	2
		Total	**19**

Second Quarter

ENG	120	Applied Technical Writing for Vocations[1]	3
NATRS	122	Natural Resources Trigonometric Applications	5
NATRS	215	Forest Measurements	5

NATRS	220	Introduction to Geographic Information Systems for Natural Resources	4
NATRS	225	Natural Resources Occupational Experience	2
		Total	**19**

Third Quarter

ENVSC	227	Advanced Wildlife Biology[4] OR	
NATRS	130	Chainsaw Operation, Maintenance and Safety[3]	3-4
NATRS	201	Forest Protection	5
NATRS	204	Maps and Aerial Photo Interpretation	5
NATRS	205	Surveying	5
NATRS	225	Natural Resources Occupational Experience	1
		Total	**19-20**

SECOND YEAR: EACH STUDENT SELECTS A NATURAL RESOURCE OPTION.

Forestry Option

Fourth Quarter

NATRS	203	Forest Harvesting and Products	5
NATRS	209	Silviculture	5
NATRS	216	Forest Inventory	5
NATRS	225	Natural Resources Occupational Experience	1
		Total	**16**

Fifth Quarter

ENVSC	101	Environmental Conservation	5
ENVSC	210	Environmental Soil Science	5
NATRS	225	Natural Resources Occupational Experience	1
NATRS	230	Global Positioning Systems	3
		Total	**14**

Sixth Quarter

ENVSC	207	Wildlife Biology	5
ENVSC	218	Environmental Science Conservation Planning	3
NATRS	208	Outdoor Recreation and Interpretation	5
NATRS	221	Applications in Geographic Information Systems	5
		Total	**18**

Parks And Recreation Option

Fourth Quarter

ENVSC	101	Environmental Conservation	5
NATRS	209	Silviculture	5
NATRS	225	Natural Resources Occupational Experience	1
		Elective[2]	5
		Total	**16**

Fifth Quarter

ENVSC	210	Environmental Soil Science	5
NATRS	225	Natural Resources Occupational Experience	1
NATRS	230	Global Positioning Systems	3
		Elective[2]	5
		Total	**14**

Sixth Quarter

ENVSC	207	Wildlife Biology	5
ENVSC	218	Environmental Science Conservation Planning	3
NATRS	208	Outdoor Recreation and Interpretation	5
NATRS	221	Applications in Geographic Information Systems	5
		Total	**18**

Soils Option

Fourth Quarter

NATRS	209	Silviculture	5
NATRS	225	Natural Resources Occupational Experience	1
WATER	109	Introduction to Water Resources	5
		Elective[2]	5
		Total	**16**

Fifth Quarter

ENVSC	101	Environmental Conservation	5
ENVSC	210	Environmental Soil Science	5
NATRS	225	Natural Resources Occupational Experience	1
NATRS	230	Global Positioning Systems	3
		Total	**14**

Sixth Quarter

ENVSC	207	Wildlife Biology	5
ENVSC	218	Environmental Science Conservation Planning	3
NATRS	221	Applications in Geographic Information Systems	5
		Elective[2]	5
		Total	**18**

Wildlife/Fisheries Option
Fourth Quarter

ENVSC	217	Field Sampling Techniques	4
NATRS	209	Silviculture	5
NATRS	217	Freshwater Fisheries Biology	5
NATRS	225	Natural Resources Occupational Experience	1
		Total	**15**

Fifth Quarter

ENVSC	210	Environmental Soil Science	5
NATRS	225	Natural Resources Occupational Experience	1
NATRS	230	Global Positioning Systems	3
WATER	209	Water Quality	5
		Total	**14**

Sixth Quarter

ENVSC	207	Wildlife Biology	5
ENVSC	218	Environmental Science Conservation Planning	3
NATRS	208	Outdoor Recreation and Interpretation	5
NATRS	221	Applications in Geographic Information Systems	5
		Total	**18**

104-106 credits are required for an A.A.S. degree.

[1] *Approved written communications course at the level appropriate for the student.*

[2] *Electives must be approved by the Natural Resources Department.*

[3] *Required option for all programs except Wildlife/Fisheries.*

[4] *Required option only for Wildlife/Fisheries.*

NETWORK DESIGN AND ADMINISTRATION

A.A.S. Degree, Certificate: SCC

The network design and administration program prepares students as local- and wide-area network administrators. Successful completion of the program provides students with the essential skills of network administration including network design, implementation, maintenance, optimization, and troubleshooting, utilizing a variety of network operating systems, and hardware platforms and protocols. These include but are not limited to Microsoft, Cisco and UNIX. Upon completion, students have covered objectives leading toward professional certification. Effective oral and written communications are emphasized throughout the program.

Degree Prerequisites/Requirements:

- Prior completion of BT 100 and CIS 110 or permission of the program lead.

- All required courses must be completed with a grade of 2.0 or better before proceeding to the next quarter or before a diploma is awarded.

FIRST YEAR
First Quarter

CIS	205	Advanced Operating Systems	5
CIS	240	Introduction to Networks	5
ENG	101	English Composition	5
		Total	**15**

Second Quarter

CIS	244	Windows 2003 Server	5
CIS	250	Cisco Networking	5
CIS	271	Server and Introduction to Wireless Technologies	5
		Math Elective[1]	5
		Total	**20**

Third Quarter

CIS	206	Introduction to UNIX	5
CIS	236	Windows 2003 Network Infrastructure	5
CIS	251	Cisco Network Routing	5
		Communications Elective[2]	5
		Total	**20**

SECOND YEAR
Fourth Quarter

CIS	213	Advanced UNIX	5
CIS	234	Network Scripting	3
CIS	252	Cisco LAN Design	5
MMGT	242	Project Management	2.5
		Total	**15.5**

Fifth Quarter

BT	160	Job Preparation Techniques	3
CIS	247	Systems Management	5
CIS	253	Cisco WAN Design	5
CIS	263	Exchange Server Administration	5
		Total	**18**

Sixth Quarter

CIS	270	Principles of Network Security	5
CIS	275	Networking Capstone	5
CIS	286	Voice Over IP	5
		Total	**15**

Certificate
First Quarter

CIS	205	Advanced Operating Systems	5
CIS	240	Introduction to Networks	5
ENG	101	English Composition	5
		Total	**15**

Second Quarter

CIS	244	Windows 2003 Server	5
CIS	250	Cisco Networking	5
CIS	271	Server and Introduction to Wireless Technologies	5
		Math Elective[1]	5
		Total	**20**

Third Quarter

CIS	206	Introduction to UNIX	5
CIS	236	Windows 2003 Network Infrastructure	5
CIS	251	Cisco Network Routing	5
		Communications Elective[2]	5
		Total	**20**

103.5 credits are required for an A.A.S. degree and 55 credits are required for a certificate.

[1] *Select from the following math electives: GBUS 217, MATH 111, 115, 201, PHIL 201.*

[2] *Select from the following communications electives: ENG 120, 205, GBUS 280, SPCH 102, 220, 250, 286.*

NONINVASIVE CARDIOVASCULAR TECHNOLOGY

A.A.S. Degree: SCC

Noninvasive cardiovascular technology is an allied health profession specifically concerning the diagnosis and treatment of patients with cardiac and peripheral vascular disease. The technologist performs examinations at the request or direction of a physician. Through subjective sampling and/or recording, the technologist proceeds with the examination to create an easily definable foundation of data from which a correct anatomic and physiologic diagnosis may be established for each patient.

The primary role of the noninvasive cardiovascular technologist is to obtain recordings of ultrasound images of the heart and related structures for the physician to interpret. The various types of ultrasound equipment require a highly skilled operator to obtain the imaging information or other data required. The noninvasive cardiovascular

technologist must obtain appropriate clinical history, cardiac-related physical findings, and pertinent laboratory data in order to adapt the imaging techniques to obtain comprehensive and diagnostic echocardiographic information.

Admission Prerequisites/Requirements:

- High school diploma or GED certificate
- MATH 0991
- CHEM 1611
- BIOL 1011
- Interview with cardiovascular technology instructor
- Appropriate scores in one of the following: ASSET or Compass

Admission Recommendations:

- Computer skills
- Active email account

  A 2.0 grade must be maintained quarterly in every course before proceeding to the next quarter.

FIRST YEAR

First Quarter

A-P	242	Human Anatomy and Physiology	5
CHEM	120	Organic and Biochemistry for the Health Sciences	5
ICT	114	Cardiovascular I	4
NCT	113	Electrophysiology I	4
		Total	**18**

Second Quarter

A-P	243	Human Anatomy and Physiology	5
ICT	124	Cardiovascular II	4
NCT	123	Electrophysiology II	4
PHYS	120	Fundamentals of Medical Physics	5
		Total	**18**

Third Quarter

ICT	134	Invasive Cardiovascular Fundamentals	5
ICT	138	Cardiovascular Physiology	3
NCT	133	Noninvasive Cardiovascular Fundamentals	5
PHYS	121	Medical Physics II	4
		Total	**17**

Fourth Quarter

NCT	141	Computers for the CV Technologist	3
NCT	142	Noninvasive Cardiovascular Clinical	4
NCT	143	Noninvasive Cardiovascular Clinical Observation	6
		Total	**13**

SECOND YEAR

Fifth Quarter

NCT	251	Echocardiography Clinical I	4
NCT	253	Echocardiography I	11
		Total	**15**

Sixth Quarter

NCT	261	Echocardiography Clinical II	4
NCT	263	Echocardiography II	11
		Total	**15**

Seventh Quarter

NCT	273	Echocardiography Clinical III	13
		Total	**13**

109 credits are required for an A.A.S. degree.

Students may repeat a noninvasive course once, but it must be repeated within two years.

[1] *All math and science courses must be within the last five years and must have been completed with a 2.0 grade or better.*

NURSING PROGRAM (RN, LPN)

A.A.S. Degree, Certificate: SCC

The purpose of the nursing program, consistent with the mission and objectives of Community Colleges of Spokane, is to prepare men and women to assume entry-level positions as Licensed Practical Nurses (LPN) and Registered Nurses (RN) in the community. Program goals are integrated into the philosophy, conceptual framework, terminal objectives and course objectives for the program. Program of study includes both nursing and general education courses. Supervised clinical experience is provided in selected nursing areas.

After the second quarter, the student is eligible to take the Washington state exam for the Nursing Assistant Certified (NAC). At the completion of the first four quarters, the student is eligible to write the NCLEX Practical Nursing examination. At the completion of seven quarters of the nursing curriculum, the graduate may write the NCLEX exam for Registered Nurse. The program is approved by the Washington State Nursing Care Quality Assurance Commission and is accredited by the National League for Nursing Accrediting Commission.

Admission Prerequisites/Requirements:[1]

- High school graduate with a 2.5 GPA or GED
- BIOL 101
- CHEM 161
- MATH 96
- Physical examination/immunizations/drug screening (completed after acceptance into the nursing program-forms available in the SCC Admissions Office)
- The Science Department requires entering students to complete A-P 242 and 243, and MBIOL 231 within five years of finishing BIOL 101, CHEM 161 and MATH 96.
- 2.0 GPA or better must be maintained in all prerequisites and all subjects required for a degree. Any course in which a student earns below 2.0 GPA must be repeated before progressing in the program.
- LPNs and transfer students applying for advanced standing will be evaluated on an individual basis — Challenge tests may be offered.
- Students may repeat a nursing class once: a maximum of two nursing courses may be repeated.
- Once the student starts NURS 116, he/she must complete the first year within three years. Once the student starts NURS 215, he/she must complete the second year within three years.

A.A.S. Degree (RN)

FIRST YEAR

First Quarter

A-P	242	Human Anatomy and Physiology	5
NURS	116	Nursing Foundations	9
PSYCH	101	Introduction to Psychology	5
		Total	**19**

Second Quarter

A-P	243	Human Anatomy and Physiology	5
NURS	125	Introduction to Medical/Surgical Nursing	8
NURS	131	Intravenous Therapy Concepts	1
		Total	**14**

Third Quarter

ENG	101	English Composition	5
HED	121	Cultural Diversity in Health Care	1
NURS	135	Parental and Perinatal Nursing	5
NURS	136	Mental Health Nursing	6
		Total	**17**

Fourth Quarter

NURS	141	Professional Relationships	1
NURS	145	Medical Surgical Nursing Concepts	12
PSYCH	210	Developmental Psychology	5
		Total	**18**

Upon completion of the first four quarters of the nursing program, the student is eligible to write the NCLEX Practical Nursing Exam

SECOND YEAR

Fifth Quarter

MBIOL	231	General Microbiology	5
NURS	215	Advanced Nursing Concepts I	10
		Total	**15**

Sixth Quarter

NURS	225	Advanced Nursing Concepts II.	10
NURS	226	Health Care Management[2]	2
		Elective[3]	5
		Total	**15-17**

Seventh Quarter

NURS	226	Health Care Management[2]	2
NURS	235	Advanced Nursing Concepts III	11
		Elective[3]	5
		Total	**16-18**

116 credits are required for an A.A.S. degree and 68 credits are required for a certificate.

Upon completion of seven quarters of the nursing program, the student is eligible to write the NCLEX Registered Nursing Exam.

[1] *The nursing program incorporates a selective process for admission. This admission process uses a point system based on relevant coursework completed at the time of application. Entry into the nursing program will be determined by this point system. Please be aware that because of the number of applicants for this program, the completion of all prerequisites does not ensure admission into the program.*

[2] *May be taken either 6th or 7th quarter.*

[3] *Any course numbered 100 or above.*

OFFICE ASSISTANT

Certificate: SFCC

The office assistant certificate, a three-quarter program of study, prepares students for entry-level office positions. Students receiving this certificate possess skills in keyboarding and formatting, computer software applications, records management, beginning bookkeeping procedures, and business communications.

Students are prepared to greet customers, make and receive telephone calls, format correspondence and reports, maintain business files, and perform general office duties as assigned.

Students have the opportunity to bridge the gap between the classroom and the working world by participating in cooperative work-classroom experience.

First Quarter

BT	101	Keyboarding[1]	5
BT	107	Business Communications[2].	3
GBUS	102	Math Skills for Business	3
GENST	106	College Success	3
IS	160	Internet Fundamentals	1
		Total	**15**

Second Quarter

ACCT	103	Fundamental Bookkeeping Procedures	3
BT	102	Document Processing	5
BT	108	Business Communications[2].	3
CAPPS	112	Excel	1
CAPPS	114	Access	1
CAPPS	116	PowerPoint OR	
CAPPS	120	Outlook.	1
		Total	**14**

Third Quarter

BT	155	Records Information Management	3
BT	160	Job Preparation Techniques.	3
BT	231	Office Procedures.	5
BT	266	Cooperative Education Seminar.	1
BT	267	Cooperative Education Work Experience.	1
BT	272	Business Correspondence	5
		Total	**18**

47 credits are required for a certificate.

[1] *Students may take BT 102 if they possess keyboarding skills at 35 wpm and*

knowledge of business document formatting. Permission of instructor is recommended.

[2] *ENG 101 may be substituted.*

OFFICE ASSISTANT

Certificate: SCC

The office assistant certificate is a two-quarter program preparing students for entry-level positions. Students completing this program are prepared to format correspondence and reports; write routine letters, emails and memos; and perform a variety of duties depending on the office situations.

First Quarter

BT	090	Basic Grammar for Business II	5
BT	101	Keyboarding	5
BT	151	Business Student Preparation	5
		Total	**15**

Second Quarter

BT	102	Document Processing[1]	5
BT	109	Business Communications	5
BT	160	Job Preparation Techniques.	3
CATT	102	Introduction to Outlook	2.5
GBUS	103	Basic Business Math and Electronic Calculators	5
		Total	**20.5**

35.5 credits are required for a certificate.

[1] *Keyboarding proficiency of 30 wpm for three minutes with no more than six errors is a prerequisite for BT 102.*

OFFICE CLERK

Certificate: SCC

The office clerk certificate is a one-quarter program preparing students for entry-level positions. Students completing this program are prepared to format correspondence and reports, greet callers, make and receive telephone calls in a professional way, use e-mail effectively, maintain electronic calendars, and perform a variety of duties depending on the office situations.

BT	090	Basic Grammar for Business II	5
BT	102	Document Processing[1]	5
BT	231	Office Procedures.	5
CATT	102	Introduction to Outlook	2.5
		Total	**17.5**

17.5 credits required for a certificate.

[1] *Keyboarding proficiency of 30 wpm for three minutes with no more than six errors is a prerequisite for BT 102.*

OFFICE INFORMATION SYSTEMS

A.A.S. Degree: SCC

The office information systems program combines training in information processing, information systems, and office administration to give students the diversified training and background needed to hold positions of responsibility in business offices. Students are trained to use word processing, spreadsheet, database, presentation, web page development and project management software. Because using computer systems to manage information is the fundamental role of administrative office professionals, this program gives students a technical overview of office information systems, basic computer hardware and network administration. Advanced classes provide students with office procedures, project management and office management training.

FIRST YEAR

First Quarter

BT	090	Basic Grammar for Business II	5
BT	102	Document Processing	5
BT	151	Business Student Preparation	5
GBUS	103	Basic Business Math and Electronic Calculators	5
		Total	**20**

Second Quarter

BT	109	Business Communications	5
BT	165	Word Processing	5
CATT	102	Introduction to Outlook	2.5
MMGT	223	Customer Service	3
		Total	**15.5**

Third Quarter[1]

ACCT	101	Principles of Accounting OR	
ACCT	151	College Accounting I	5
BT	160	Job Preparation Techniques	3
BT	231	Office Procedures	5
		Elective[3]	5
		Total	**18**

SECOND YEAR

Fourth Quarter

BT	201	Information Processing	5
BT	250	Information Technology	5
BT	272	Business Correspondence	5
CIS	240	Introduction to Networks	5
		Total	**20**

Fifth Quarter

BT	202	Advanced Information Processing	5
BT	260	Administrative Office Management	5
CATT	172	Introduction to FrontPage	2.5
CATT	222	Advanced Microsoft Access I	2.5
CATT	223	Advanced Microsoft Access II	2.5
		Total	**17.5**

Sixth Quarter

BT	263	Integrated Office Applications	5
BT	285	Administrative Professional Internship	2
CATT	128	Desktop Publishing	5
CATT	241	Project Management Applications	2.5
MMGT	242	Project Management	2.5
		Total	**17**

108 credits are required for an A.A.S. degree.

[1] *To enter the third quarter of this program, students must pass competency tests in the following areas:*
- *Math (fractions, percentages, etc.)*
- *Writing (write a basic letter, memo, and/or e-mail with correct spelling, punctuation, grammar, etc.)*
- *Format documents from unarranged copy in a timed situation (letters, memos, reports, tables) using Word.*
- *Keyboarding proficiency of 40 wpm.*

[2] *This elective may be ACCT 141, GBUS 204, 205, 280 or SPCH 102.*

OFFICE SOFTWARE SPECIALIST

Certificate: SCC

Students enrolled in this four-quarter certificate program are trained to use word processing, spreadsheet, database and presentation software; students also format and proofread manuscripts, tables, reports, correspondence and other documents. Computers have become an integral part of every office. The ability to learn and apply software functions is important for all office workers.

FIRST YEAR

First Quarter

BT	090	Basic Grammar for Business II	5
BT	102	Document Processing	5
BT	151	Business Student Preparation	5
		Total	**15**

Second Quarter

BT	109	Business Communications	5
BT	165	Word Processing	5
CATT	102	Introduction to Outlook	2.5
GBUS	103	Basic Business Math and Electronic Calculators	5
		Total	**17.5**

Third Quarter[1]

BT	160	Job Preparation Techniques	3
BT	201	Information Processing	5
BT	231	Office Procedures	5
MMGT	223	Customer Service	3
		Total	**16**

SECOND YEAR

Fourth Quarter

BT	202	Advanced Information Processing	5
BT	250	Information Technology	5
CATT	128	Desktop Publishing	5
		Total	**15**

63.5 credits are required for a certificate.

[1] *To enter the third quarter of this program, students must pass competency tests in the following areas:*
- *Math (fractions, percentages, etc.)*
- *Writing (write a basic letter, memo, and/or e-mail with correct spelling, punctuation, grammar, etc.)*
- *Format documents from unarranged copy in a timed situation (letters, memos, reports, tables) using Word.*
- *Keyboarding proficiency of 40 wpm.*

OPHTHALMIC DISPENSING

Certificate: SCC

This program is designed to provide students with skills necessary to begin in the optical industry career route to become a licensed dispensing optician. The certified ophthalmic dispenser fills and dispenses eyeglass and contact lens prescriptions in a variety of locations including optical, eye clinics and medical offices. This program is designed to follow the Washington State Dispensing Optician Skills Standards verified statewide by state licensed opticians.

First Quarter

VCT	110	Ophthalmic Optics	5
VCT	111	Ocular Anatomy and Physiology	5
VCT	112	Introduction to Pretesting	4
VCT	130	Mechanical Optics	3
		Total	**17**

Second Quarter

VCT	123	Ophthalmic Dispensing	5
VCT	126	Contact Lenses	5
		Total	**10**

27 credits are required for a certificate with a 2.0 or better.

All courses are currently offered within the SCC Vision Care Specialist Certificate.

ORTHOTIC-PROSTHETIC TECHNICIAN

A.A.S. Degree, Certificate: SFCC

Orthotics and prosthetics is the design and fabrication of braces and artificial limbs and is one of today's rapidly growing health-related professions. Advancing materials technology and an increasing demand for orthotic-prosthetic services has led to an increase in the amount of technical support needed. There are many opportunities for the students completing a formal training program in orthotics and prosthetics.

The primary objective is to train students in the general fabrication procedures of orthotic and prosthetic devices, which include working with thermoplastic, metal, leather, plaster, and orthotic and prosthetic components. Subjects covered include related human anatomy, technology of materials, hand and power tools, equipment, and laboratory safety.

A certificate is awarded at the completion of the orthotics program and at the completion of the prosthetics program. An associate in applied science degree in orthotics and prosthetics is granted to students who successfully complete both programs.

Prosthetics Certificate Program

One year of two-year A.A.S. degree in orthotic-prosthetic technician program.

First Quarter

OR-PR	111	Prosthetic Tools and Materials	4
OR-PR	112	Related Human Anatomy	3
OR-PR	114	Below Knee Prosthetics	10
		General Education Requirement	1-5
		Total	**18-22**

Second Quarter

OR-PR	122	Related Anatomy of the Above Knee Amputation	3
OR-PR	124	Advanced Below Knee Prosthetics	4
OR-PR	126	Above-the-Knee Prosthetics	10
		General Education Requirement	1-5
		Total	**18-22**

Third Quarter

OR-PR	132	Related Anatomy (Upper Extremity)	2
OR-PR	134	Below Elbow Prosthetics	8
OR-PR	136	Above Elbow Prosthetics	7
		General Education Requirement	1-5
		Total	**18-22**

Fourth Quarter

OR-PR	138	Clinical Prosthetics	6
		Total	**6**

Orthotics Certificate Program

One year of two-year A.A.S. degree in orthotic-prosthetic technician program.

First Quarter

OR-PR	141	Orthopedic Equipment and Materials	4
OR-PR	142	Spinal Anatomy Related to Orthotics	3
OR-PR	144	Spinal Orthotics	10
		General Education Requirement	1-5
		Total	**18-22**

Second Quarter

OR-PR	152	Foot and Ankle Skeletal Structures	3
OR-PR	154	Orthotic Shoe Fabrications	4
OR-PR	156	Ankle-Foot Orthosis	10
		General Education Requirement	1-5
		Total	**18-22**

Third Quarter

OR-PR	162	Related Anatomy for the Above Knee Orthotics	1
OR-PR	164	Above the Knee Orthotics	8
OR-PR	172	Upper Extremity Anatomy Related to Orthotics	1
OR-PR	174	Upper Extremity Orthotics	7
		General Education Requirement	1-5
		Total	**18-22**

Fourth Quarter

OR-PR	178	Clinical Orthotics	6
		Total	**6**

132 credits are required for an A.A.S. degree and 66 credits are required for a certificate.

GENERAL EDUCATION COURSE REQUIREMENTS:

BT	107	Business Communications	3
GBUS	103	Basic Business Math and Electronic Calculators	5
HLTH	174	First Aid	3
HS	136	Improving Interpersonal Communication	5
MATH	035	The Metric System	1
SPCH	121	Job Communication Skills	2

OUTPATIENT MEDICAL CODER

Certificate: SCC

This program offers a one-year certificate and prepares students to work with health information in a range of settings including physicians' offices, nursing facilities, ambulatory care clinics and health insurance agencies. Training in realistic work environments include coding and abstracting clinical data, managing computer databases, health-related legal principles and policies, and knowledge of the Heath Insurance Portability and Accountability Act (HIPAA) regulations. Upon completion of the program, students are eligible to take the national Certified Coding Associate (CCA) certification exam offered by the American Health Information Management Association (AHIMA).

First Quarter

HIT	104	Introduction to Health Information	3
HIT	160	Computer Theory in Health Information	3
HUC	108	Human Anatomy	5
HUC	125	Medical Terminology	5
SPCH	102	Interpersonal Communication	5
		Total	**21**

Second Quarter

HED	109	Human Physiology and Disease	5
HIT	101	Health Records Systems	5
HIT	161	Health Management Information Systems	3
HIT	212	Acute Care Coding	5
		Total	**18**

Third Quarter

HIT	129	Pathophysiology	5
HIT	162	Electronic Health Record Systems	3
HIT	214	Ambulatory Care Coding	5
HIT	216	Reimbursement Strategies for HIM Professionals	5
HUC	105	Legal Concepts in Health	3
		Total	**21**

Fourth Quarter

GBUS	103	Basic Business Math and Electronic Calculators	5
HIT	203	Clinical Practice	3
SPCH	220	Intercultural Communication	5
		Total	**13**

73 credits are required for a certificate.

PARALEGAL

A.A.S. Degree, Certificate: SCC

A paralegal/legal assistant is qualified through education, training or work experience to perform substantive legal work that requires knowledge of legal concepts and is customarily, but not exclusively, performed by a lawyer. This person may be retained or employed by a lawyer, law office, governmental agency, or other entity or may be authorized by administrative, statutory or court authority to perform this work. This definition includes those individuals who, with administrative, statutory or court authority, perform substantive legal work directly to the public [National Federation of Paralegal Associations (NFPA)].

This nationally ranked ABA approved program consists of basic and specialty courses designed to prepare students for employment in the legal services field. An A.A.S. degree is awarded after completion of 94-99 credits of required coursework (depending on the math requirement). If full class loads are taken each quarter, the program requires 6-8 quarters to complete. Most specialty classes are taught early morning or evening. The supervised legal work experience required for graduation or the internship must be approved by the program coordinator. Ask a counselor or faculty adviser about transfer articulation agreements with 4-year institutions.

Note: A Paralegal graduate does not receive a license to practice law; thus performing legal work directly for the public or giving legal advice directly to the public constitutes the unauthorized practice of law.

Program Requirements:

Prior to acceptance into the course of study leading to the A.A.S. degree in paralegal studies, students must either achieve a 60 percentile/42 scaled score or better on the written section of the college's assessment test or receive a 2.0 grade or better in Business Communications, BT 109.

Students working toward the A.A. degree for transfer to a four-year institution should consult individually with an adviser or counselor for planning the A.A. degree program. For information on A.A. degree requirements, refer to the Degree and Certificate Requirements section

of this catalog. More information on specific transfer programs can be found in the academic programs section of this catalog.

A.A.S. Degree:

The degree requires 27 credits of general education courses, 5 credits of other courses (depending on the student's choice of math requirement under the general education courses), 31 credits of basic courses, 8 credits of supervised legal work experience and 28 credits of specialty courses. In the general education courses, at least 15 credits must be distributed among three of the four areas: social science area, humanities area, communication area and math area. The remaining 12 credits may be taken in any combination within these three areas to satisfy the general education courses requirement. All general education courses must be from the paralegal program's approved list.

Students should begin early to meet the prerequisites for LA 120 which are LSEC 239 or 249 and a college-level computer course recommended to be selected from the BT, CIS or LSEC departments' offerings.

Core Curriculum
General Education Courses

ENG	101	English Composition or other communications course[1]	5
MATH	111	Pre-Calculus I OR higher[1,2]	0-5
		Social Science course[1] AND/OR	
		Humanities course[1]	5-10
		General electives[1]	12

Other Courses

GBUS	104	Business Mathematics[2]	0-5
		Total	**27-32**

Basic Courses

GBUS	204	Introduction to Law	5
LA	100	Legal Careers Orientation	1
LA	101	Introduction to Paralegalism	2
LA	105	Washington Court Rules-State and Federal	3
LA	110	Legal Research and Writing[3]	5
LA	118	Instrument Drafting	3
LA	120	Law Office Computing[4]	5
LA	125	Advanced Law Office Computing	5
LA	130	Legal Ethics	1
LA	135	Professional Effectiveness	1
		Total	**31**

Supervised Legal Work Experience

LA	245	Supervised Legal Work Experience[5]	8
		Total	**8**

Specialty Courses[6]

ACCT	101	Principles of Accounting OR	
ACCT	151	College Accounting I	5
LA	201	Introduction to Probate	3
LA	207	Community Property and Domestic Relations I	3
LA	211	Debtor-Creditor and Bankruptcy	3
LA	212	Administrative Law	3
LA	215	Commercial Transaction	3
LA	217	Business Organizations	3
LA	218	Employment Law	3
LA	219	The Criminal Process	3
LA	220	Torts	3
LA	221	Property and Real Estate Transactions I	3
LA	223	Idaho Civil and Criminal Court Rules	3
LA	225	Trial Preparation and Procedures I	3
LA	227	Trial Preparation and Procedures II	3
LA	230	Insurance Law for Legal Assistants	3
LA	240	Special Issues Seminar[7]	1-10
LA	285	Legal Office Internship[8]	3
MSEC	101	Medical Terminology and Anatomy	5
MSEC	102	Medical Terminology and Anatomy	5
		Total	**28**

94-99 credits minimum (depending on the student's choice of math) with a grade of 2.0 or better in each class (including prerequisites) are required for an A.A.S. degree.

A list of curriculum specialties can be found following the certificate program.

Prerequisites and substitutions for courses may be made and/or waived by the program coordinator.

[1] *See department program coordinator for additional list of courses.*

[2] *If the student chooses GBUS 104 as a math requirement, student must complete an additional five credits from the list of communications, social science, or humanities electives.*

[3] *Prerequisites are ENG 101 and LA 101.*

[4] *Prerequisites are LSEC 239 or 249 and a college-level computer course recommended to be selected from the BT, CIS, or LSEC departments' offerings.*

[5] *Students must complete 8 credits.*

[6] *Prerequisites for all Legal Specialty Courses: LA 100, 101, 110.*

[7] *Because each course is different, LA 240 may be repeated as frequently as desired and all credits received may be applied toward the 28 specialty credit requirements for degree.*

[8] *Maximum of 3 credits of internship may be applied toward this degree.*

Certificate

This nationally ranked ABA approved program consists of basic and specialty courses designed to prepare students for employment in the legal services field. A paralegal certificate is awarded after completion of 68-73 credits of required coursework (depending on the math requirement). If full class loads are taken each quarter, the program requires 4-6 quarters to complete. Most specialty classes are taught early morning or evening. The supervised legal work experience required for graduation or internship must be approved by the program coordinator. Ask a counselor or faculty adviser about transfer articulation agreements with 4-year institutions.

Note: A Paralegal graduate does not receive a license to practice law; thus performing legal work directly for the public or giving legal advice directly to the public constitutes the unauthorized practice of law.

Program Requirements:

To enter the paralegal certificate program, students must have completed an A.A. degree or an A.A.S. degree in the Legal Administrative Assistant studies that includes 27 quarter hours or 18 semester hours of acceptable general education and/or a B.A. degree and/or B.S. degree from an accredited college and/or university. Substitutions for prerequisites and program courses may be made and/or waived by the program coordinator.

The certificate requires 10 credits of general education courses and 26 credits of basic law courses, plus 8 credits of LA 245, 24 credits of legal specialty courses and 5 credits of other courses if the student does not select from the math options portion of the general education courses. Students with at least one or more years of current legal experience under the direct supervision of an attorney may, with the approval of the program coordinator, have a part of LA 245 waived and instead substitute an equal number of additional legal specialty courses credits.

Students should begin early to meet the prerequisites for LA 120 which are LSEC 239 or 249 and a college-level computer course recommended to be selected from the BT, CIS or LSEC departments' offerings.

Core Curriculum
General Education Courses

MATH	111	Pre-Calculus I OR higher[1,2]	5
		Social Science course[1] AND/OR	
		Humanities course[1]	5
		Total	**10**

Other Courses

GBUS	104	Business Mathematics[2]	0-5
		Total	**0-5**

Basic Courses

LA	100	Legal Careers Orientation	1
LA	101	Introduction to Paralegalism	2
LA	105	Washington Court Rules-State and Federal	3
LA	110	Legal Research and Writing[3]	5
LA	118	Instrument Drafting	3
LA	120	Law Office Computing[4]	5
LA	125	Advanced Law Office Computing	5
LA	130	Legal Ethics	1
LA	135	Professional Effectiveness	1
		Total	**26**

Supervised Legal Work Experience
LA   245   Supervised Legal Work Experience[5] 8
    Total 8

Specialty Courses[6]
ACCT   101   Principles of Accounting[7] OR
ACCT   151   College Accounting I[7] 5
GBUS   204   Introduction to Law[7] 5
LA   201   Introduction to Probate 3
LA   207   Community Property and Domestic Relations I 3
LA   211   Debtor-Creditor and Bankruptcy 3
LA   212   Administrative Law 3
LA   215   Commercial Transaction 3
LA   217   Business Organizations 3
LA   218   Employment Law 3
LA   219   The Criminal Process 3
LA   220   Torts 3
LA   221   Property and Real Estate Transactions I 3
LA   223   Idaho Civil and Criminal Court Rules 3
LA   225   Trial Preparation and Procedures I 3
LA   227   Trial Preparation and Procedures II 3
LA   230   Insurance Law for Legal Assistants 3
LA   240   Special Issues Seminar[8] 1-10
LA   285   Legal Office Internship[9] 3
MSEC   101   Medical Terminology and Anatomy [7] 5
MSEC   102   Medical Terminology and Anatomy [7] 5
    Total 24

68-73 credits (depending on the student's choice of math) with a grade of 2.0 or higher in each class (including prerequisites) are required for a certificate.

A list of curriculum specialties can be found following the certificate program.

Prerequisites and substitutions for courses may be made and/or waived by the program coordinator.

The curriculum is intentionally designed to provide a broad education across several practice areas. Students may wish to narrow their education around a specialty. For those students wishing to do so, the following are some recommendations from among the specialty classes:

■ Litigation Specialist: LA 220, 223, 225, 227, 230, 240; MSEC 101,102.

■ General Office Specialist: LA 201, 207, 211, 212, 215, 220, 221, 230.

■ Business Specialist: ACCT 101, 151; GBUS 205; LA 211, 212, 215, 217, 218, 220, 230, 240.

■ Criminal Specialist: LA 219, 220, 223, 225, 227, 240; MSEC 101, 102.

Students are encouraged to confer with college counselors and/or program coordinator with respect to tailoring a course of study most suitable to that student's circumstances, skills and goals. In most situations, a broad education across several practice areas is most appropriate.

[1] See department for additional list of courses.

[2] Only needed if the student chooses GBUS 104 as his/her math requirement. (Not required if MATH 111 or higher is chosen for the math requirement.)

[3] Prerequisite is ENG 101 and LA 101.

[4] Prerequisites are LSEC 239 or 249 and a college-level computer course recommended to be selected from the BT, CIS or LSEC departments' offerings.

[5] Students must complete 8 credits.

[6] Prerequisites for all Legal Specialty Courses: LA 100, 101, 110.

[7] Students may use only three of these courses, 15 credits total, toward the 24 Specialty elective credits.

[8] Because each course is different, LA 240 may be repeated as frequently as desired and all credits received may be applied toward the 24 specialty credit requirements for the degree.

[9] Maximum of 3 credits of internship may be applied toward this degree.

PHARMACY TECHNICIAN
A.A.S. Degree, Certificate: SCC

The pharmacy technician program trains students in all phases of the pharmacy field: drug products, calculations, dosages, dispensing techniques, inventory management, and Washington pharmacy law. Graduates will be prepared to work in both community and hospital pharmacy settings.

Admission Prerequisite/Requirements:
■ High school diploma or GED certificate
■ Washington State Patrol (WSP) background check
■ Drug Screening
■ Typing test with a score of 35-40 wpm or completion of BT 101 within the last 5 years
■ Interview with pharmacy technician instructor
■ 2-hour observation in the pharmacy technician lab
■ 3 letters of recommendation
■ Appropriate scores on one of the following: ASSET or Compass
■ Students may repeat a pharmacy technician class once, but it must be repeated within two years
■ Each required course for graduation must be completed with a 2.0 grade or better before proceeding to the next quarter
■ If the student does not pass a winter quarter class and has to repeat the class the next year, they must also pass the technique skills for the lab portion of PHARM 123 and 124.

First Quarter
HED   108   Human Anatomy 5
HED   125   Medical Terminology 5
PHARM 101   Introduction to Pharmacy Technician 3
PHARM 115   Mathematics for Pharmacy Technicians 5
PHARM 119   Pharmacology 3
    Total 21

Second Quarter
ENG   189   Writing for Vocational Students 2
PHARM 122   Advanced Pharmacology 5
PHARM 123   Hospital Pharmacy Dispensing and Management 5
PHARM 124   Community Pharmacy Dispensing and Management . 3
PHARM 131   Pharmacy Law and Ethics 3
SPCH   127   Leadership Development 3
    Total 21

Third Quarter
PHARM 130   Entering the Work Environment 2
PHARM 132   Community Pharmacy 6
PHARM 133   Hospital Pharmacy 6
    Total 14

Liberal Arts Curriculum (Optional)
Required Courses for Optional A.A.S. Degree:
CIS   110   Introduction to Computer Applications 5
ENG   101   English Composition 5
PSYCH   101   Introduction to Psychology 5
SOC   101   Introduction to Sociology 5
SPCH   102   Interpersonal Communication 5
SPCH   220   Intercultural Communication 5
        Electives[1] 7

OPTIONAL ELECTIVES TO CONSIDER:
ENG   201   Advanced English Composition 5
GBUS   101   Introduction to Business 5
GBUS   280   Human Relations in Business 5
MATH   115   Math for the Liberal Arts 5
MMGT   101   Principles of Management 5
SOC   211   Marriage and the Family 5

93 credits are required for an A.A.S. degree and 56 credits are required for a certificate.

Each required course for graduation must be completed with a 2.0 grade or better before proceeding to the next quarter.

The student may enroll in liberal arts either preceding or following the professional curriculum.

For an associate in applied science degree, the student must complete 30 credit hours of required courses and 7 hours of department approved electives numbered 100 or above in addition to the one-year professional curriculum. A grade point of 2.0 or better must be maintained in all classes.

[1] *Departmentally approved elective numbered 100 or above.*

PHOTOGRAPHY

A.A.S. Degree: SFCC

Founded in 1965, the photography program at Spokane Falls Community College is an intensive two-year study of visual communications. Students explore career opportunities in commercial illustration, corporate communications, photojournalism and portraiture, and have opportunities to interact with industry through field trips, guest speakers and cooperative work experiences.

First-year students learn the fundamentals of lighting and composition while surveying career fields. Second-year students complete projects with real world scenarios and focus on prevailing trends in technology.

In addition to teaching technical skills and artistic design, the program stresses positive work habits and helps students develop personal career goals.

With guidance from an advisory committee made up of employers and working professionals, the photography program is constantly updated to reflect current industry standards.

FIRST YEAR

First Quarter

GBUS	103	Basic Business Math and Electronic Calculators	5
PHOTO	101	Introduction to Photography	5
PHOTO	102	Photographic Appreciation	2
PHOTO	126	Digital Photography I	5
		Total	**17**

Second Quarter

BT	107	Business Communications [1]	3
PHOTO	111	Studio Photography I	4
PHOTO	112	Photographic Design	4
PHOTO	115	Photography Lab II	3
		Photography Elective	3
		Total	**17**

Third Quarter

ART	105	Color and Design	5
BT	108	Business Communications [1]	3
PHOTO	121	Location Photography I	4
PHOTO	125	Photography Lab III	3
		Photography Elective	3
		Total	**18**

SECOND YEAR

Fourth Quarter

HS	136	Improving Interpersonal Communication OR	
GBUS	280	Human Relations in Business	5
PHOTO	200	Photography Media	4
PHOTO	205	Photography Lab IV	3
		Photography Electives	3-6
		Total	**15-18**

Fifth Quarter

GENST	109	Applied Critical Thinking	3
PHOTO	215	Photography Lab V	3
PHOTO	227	Business of Photography	3
		Photography Electives	6-8
		Total	**15-17**

Sixth Quarter

PHOTO	225	Photography Lab VI	3
PHOTO	266	Cooperative Education Seminar	1
PHOTO	267	Cooperative Education Work Experience	2-5
		Photography Electives	8-10
		Total	**14-19**

96-106 credits are required for an A.A.S. degree.

PHOTOGRAPHY APPROVED ELECTIVES:

ART	127	Visual Arts Special Workshops	1-15
ART	189	Printmaking	4
ART	191	Screen Printing	4
ART	192	Printmaking, Intaglio	4
ART	193	Lithography (Printmaking)	4
GRDSN	155	FreeHand I	2
GRDSN	156	Illustrator I	2
GRDSN	157	QuarkXPress I	2
GRDSN	158	PhotoShop I	2
GRDSN	160	Director	2
GRDSN	162	MacIntosh OS X	2
GRDSN	163	InDesign I	2
GRDSN	164	Illustrator II	2
GRDSN	165	QuarkXpress II	2
GRDSN	166	PhotoShop II	2
GRDSN	167	Fireworks	2
GRDSN	168	InDesign II	2
GRDSN	171	Flash	2
GRDSN	172	Dreamweaver	2
GRDSN	173	Flash II	2
GRDSN	174	Dreamweaver II	2
GRDSN	200	Graphic Design Workshop	3
PHOTO	120	Photographic Arts	3
PHOTO	131	Introduction to Photojournalism	3
PHOTO	132	Advanced Black and White Photography	3
PHOTO	133	Color Lab	3
PHOTO	231	Studio Photography II	4
PHOTO	232	Portraiture	4
PHOTO	233	Location Photography II	4
PHOTO	234	Digital Photography II	5
PHOTO	235	Nature and Landscape Photography	5
PHOTO	236	Photography Workshop	1-4
PHOTO	237	Introduction to Documentary DV Production	3
PHOTO	267	Cooperative Education Work Experience	1-5
PHOTO	291	Independent Study	1-5
PHOTO	292	Independent Study	1-5
PHOTO	293	Independent Study	1-5

[1] *ENG 101 or ENG 105 may be substituted for BT 107 and 108.*

PHYSICAL THERAPIST ASSISTANT

A.A.S. Degree: SFCC

SFCC offers a two-year program to prepare physical therapist assistants for immediate employment in physical therapy facilities. The program includes study in anatomy and physiology, social science, technical physical therapy courses and practical clinical experience in area health care facilities affiliated with the college. The program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association. The technical courses for the physical therapist assistant program are not designed to transfer to four-year schools.

Physical therapist assistants work under the supervision of a physical therapist in the delivery of physical therapy services. Their duties include assisting the physical therapist in implementing treatment programs according to the plan of care, training patients in exercises and activities of daily living, conducting treatments, using special equipment, administering modalities and other treatment procedures, and reporting to the physical therapist on the patient's responses.

Physical therapy practitioners work with the entire spectrum of the patient population and are employed in a wide variety of settings, including hospitals and medical centers, rehabilitation centers, pediatric facilities or school systems, private physical therapy clinics, home health care agencies, convalescent centers and extended care facilities.

Admission Prerequisites/Requirements:

- Completion of the Physical Therapist Assistant Program Application Booklet which is available at the SFCC Counseling Center. Applications are accepted during the winter quarter preceding the fall quarter of entry into the program.
- COMPASS/ASSET score placement into ENG 101 OR transcript showing completion of a 5-credit college-level English composition

course

- COMPASS/ASSET score placement in MATH 92 OR MATH 96 OR transcript showing completion of college-level elementary/introductory algebra OR successful completion of a prerequisite course for placement into MATH 92 OR MATH 96
- Completion of five quarter-credits of a laboratory course of anatomy and physiology within the past five years (A-P 242). Coursework older than five years will be evaluated on a case-by-case basis.1
- GPA of 2.0 in all prerequisites and all subjects required for the degree
- Documentation of either paid or volunteer experience in a medical setting (prefer physical therapy)
- Current immunizations, and passing of physical examination, drug screening and Washington State Patrol criminal background check

1)The PTA program incorporates a selective process for admission. This admission process uses a point system based on relevant coursework completed at the time of application and verification of paid or volunteer experience in a medical setting. Please be aware that the completion of all prerequisites does not ensure admission to the program.

2)It is strongly recommended that students take the other general education requirements prior to entering the program. These include Psychology 101, MATH 92 or MATH 96 or equivalent intermediate algebra, and English 101 or equivalent English composition.

3)For the complete Physical Therapist Assistant Instruction Booklet, please contact the SFCC Career Center.

FIRST YEAR

First Quarter

PTA	101	Introduction to Physical Therapy	3
PTA	102	Physical Therapy Terminology	1
PTA	106	Regional Human Anatomy and Physiology	5
PTA	110	PTA Procedures I: Basic PT Procedures	7
		Total	**16**

Second Quarter

PTA	103	Applied Anatomy	6
PTA	104	Survey of Pathophysiology	5
PTA	105	Introduction to Neuroscience	4
		Total	**15**

Third Quarter

PTA	111	PTA Procedures II: PT Modalities	7
PTA	112	PTA Procedures III: Functional Restoration	7
PTA	151	Clinical Experience I	2
		Total	**16**

Summer Quarter (Admission preference is given to students who complete these courses before entry)

ENG	101	English Composition	5
MATH	092	Elementary Algebra II OR	
MATH	096	Introductory Algebra	5
PSYCH	101	Introduction to Psychology	5
		Total	**15**

SECOND YEAR

Fourth Quarter

PTA	202	Introduction to Orthopedics	3
PTA	210	PTA Procedures IV: Therapeutic Exercise	7
PTA	212	PTA Procedures VI: Pediatric Rehabilitation	3
PTA	251	Clinical Experience II	2
		Total	**15**

Fifth Quarter

PTA	201	Issues in Physical Therapy and Health Care	2
PTA	211	PTA Procedures V: Rehabilitation Applications	7
PTA	252	Clinical Experience III	4
		Total	**13**

Sixth Quarter

PTA	253	PTA Clinical Affiliation	12
		Total	**12**

102 credits required for an A.A.S. degree.

1 BIOL 101 is a prerequisite for A-P 242 or permission of instructor.

RADIOLOGY TECHNOLOGY

A.A.S. Degree: SCC

Radiologic technologists are an integral part of a team of healthcare workers providing patient care. Their primary duties include producing radiographic examinations that aid the physicians in diagnosing diseases and/or injuries. The radiologic technologist performs examinations at the request of a physician.

The technologist's primary role is obtaining top quality radiographic images while providing patient care. Radiologic departments can be found in hospitals, freestanding clinics and physician offices. While in the program the students become proficient at performing examinations in general radiography, fluoroscopy, surgery, trauma and intensive care units.

The program meets the criteria set forth by the Joint Review Committee on Education in Radiologic Technology (JRCERT) in collaboration with academic guidelines set by the American Society of Radiologic Technologists (ASRT).

Upon completion and graduation of the program the students are able to take the national registry examination given by the American Registry of Radiologic Technologists (ARRT).

Each required course for graduation must be completed with a grade of 2.0 or better before proceeding to the next quarter. All clinicals must be completed with a grade of 2.5 or better.

Admission Requirements:

- Radiology courses are limited to students of the Radiology Technology program.
- A Washington State Patrol (WSP) background check is required.
- A minimum score of 41 on the ASSET test is required in each session.
- Students applying to the course must have completed 80 hours as a volunteer or employee in a patient care setting, and 10 of these hours need to be completed in a radiology department.
- Interviews will be conducted as part of the selection process for the radiology program.
- Students must provide three confidential letters of recommendation.
- Physical examination, immunizations, and drug screening are required (after being accepted into the radiology technology program). Forms are available in the SCC registration office.
- A-P 242 Human Anatomy and Physiology1
- A-P 243 Human Anatomy and Physiology1
- CIS 110 Introduction to Computer Applications or documented equivalent.
- MATH 099 Intermediate Algebra2
- PHYS 100 Introductory Physics

All math and science prerequisites must have been completed within the last five years with a grade of 2.0 or better.

FIRST YEAR

First Quarter

RAD	111	Radiographic Positioning I	5
RAD	112	Medical Terminology for Radiology I	1
RAD	113	Patient Care and Ethics I	2
RAD	114	Radiographic Image Evaluation I	2
RAD	115	Fuch's Radiographic Principles I	3
RAD	116	Clinical Education I	7
		Total	**20**

Second Quarter

RAD	121	Radiographic Positioning II	3
RAD	122	Medical Terminology for Radiology II	1
RAD	123	Patient Care and Ethics II	2
RAD	124	Radiographic Image Evaluation II	2
RAD	125	Fuch's Radiographic Principles II	3
RAD	126	Clinical Education II	8
RAD	127	Mobile/Surgical Procedures	1
		Total	**20**

Third Quarter

RAD	131	Radiographic Positioning III	2
RAD	132	Radiation Physics	2
RAD	134	Radiographic Image Evaluation III	2
RAD	136	Clinical Education III	9
		Total	**15**

Fourth Quarter

RAD	141	Radiographic Positioning IV	2
RAD	144	Radiographic Image Evaluation IV	1
RAD	145	Fuch's Radiographic Principles III	2
RAD	146	Clinical Education IV	8
		Total	**13**

SECOND YEAR

Fifth Quarter

RAD	211	Radiographic Positioning V	1
RAD	212	Quality Management	1
RAD	213	Various Modalities	2
RAD	214	Radiographic Image Evaluation IV	2
RAD	215	Radiation Biology and Protection	2
RAD	216	Clinical Education V	9
		Total	**17**

Sixth Quarter

ENG	101	English Composition[2]	5
RAD	223	Radiation Pathology	2
RAD	224	Radiographic Image Evaluation V	2
RAD	225	Skull and GI Review	1
RAD	226	Clinical Education VI	9
		Total	**19**

Seventh Quarter

RAD	235	Pharmacology/Venipuncture	1
RAD	236	Clinical Education VII	9
RAD	237	Review and Registration Preparation	3
		Total	**13**

117 credits are required for an A.A.S. degree.

[1] *This course has a prerequisite of BIOL 101.*

[2] *This related education requirement may be met by any course or combination of courses approved by the instructional dean.*

RESPIRATORY CARE

A.A.S. Degree: SCC

Respiratory care is a dynamic, high tech, high touch field involving direct patient care. This field is a life supporting, life enhancing allied health care profession practiced under qualified medical direction. Services provided to patients with disorders of the cardiopulmonary system include diagnostic testing, therapeutics, monitoring and rehabilitation. Patient, family and public education are essential to the mission of the profession. Respiratory care services are provided in all health care facilities (acute, subacute/long term, skilled nursing) and in the home.

This program operates under the essentials established by the Committee on Allied Health Education Programs (CAHEP) in collaboration with the Committee on Accreditation for Respiratory Therapy Care (COARC).

Upon completion of the program, the graduate qualifies for an associate in applied science degree and is eligible to apply to take the national entry-level (CRT certification) and advanced practitioner (RRT registry) examinations offered by the National Board for Respiratory Care (NBRC). Additionally, graduates are qualified to sit for the NBRC specialty exams for pulmonary diagnostics and neonatal pediatric specialty.

Admission Prerequisites/Requirements:
- High school diploma or GED certificate
- MATH 099[1]
- CHEM 161[1]
- BIOL 101[1]
- Interview with respiratory care instructor
- Four-hour observation in the clinical setting to be arranged by respiratory care faculty
- Appropriate scores in one of the following: ASSET or Compass

Admission Recommendations:
- Computer skills
- Active email account
- American Heart Association: HCP CPR card (within six months)

FIRST YEAR

First Quarter

A-P	242	Human Anatomy and Physiology	5
NCT	113	Electrophysiology I	4
RT	110	Physical Science for Respiratory Care	3
RT	111	Respiratory Care Fundamentals I	3
RT	112	Pharmacology and Medical Terminology I	1
		Total	**16**

Second Quarter

A-P	243	Human Anatomy and Physiology	5
NCT	123	Electrophysiology II	4
RT	120	Respiratory Care Fundamentals II	4
SPCH	102	Interpersonal Communication	5
		Total	**18**

Third Quarter

MBIOL	231	General Microbiology [2]	5
RT	130	Fundamentals of Spirometry and Blood Gas Analysis	3
RT	131	Cardiopulmonary Anatomy and Physiology	1
RT	132	Respiratory Care Fundamentals III	4
RT	133	Pharmacology and Medical Terminology II	3
RT	134	Respiratory Care Clinical I	1
		Total	**17**

Fourth Quarter

RT	140	Respiratory Care Fundamentals IV	2
RT	141	Medical/Surgical Respiratory Care	1
RT	142	Computer Applications for Respiratory Care	1
RT	143	Respiratory Care Clinical II	5
		Total	**9**

SECOND YEAR

Fifth Quarter

RT	210	Critical Care I	6
RT	211	Advanced Cardiac Life Support	2
RT	212	Respiratory Care Clinical III	5
RT	213	Pulmonary Volumes, Diffusion and Instrumentation	3
RT	214	Pulmonary Diagnostics Clinical I	1
RT	215	Cardiopulmonary Pathophysiology	1
		Total	**18**

Sixth Quarter

RT	220	Critical Care II	5
RT	221	Perinatal Respiratory Care	3
RT	222	Respiratory Care Clinical IV	4
RT	223	Advanced Pulmonary Diagnostics	4
RT	224	Advanced Pulmonary Diagnostics Clinical II	1
		Total	**17**

Seventh Quarter

RT	230	Current Trends in Respiratory Care	2
RT	231	Patient Management and Problem Solving	3
RT	232	Sub-Acute/Rehabilitation Respiratory Care	2
RT	233	Fundamentals of Management in Health Care	2
RT	234	Respiratory Care Clinical V	5
		Total	**14**

109 credits are required for an A.A.S. degree.

Each required course for graduation must be completed with a 2.0 grade or better before proceeding to the next quarter.

Students may repeat/re-enter the program one time (space permitting), but must complete the program within three years. All returning students must interview with program instructor and a health science counselor.

[1] *All math and science courses must have been taken within the last five years and must have been completed with a 2.0 grade or better.*

[2] *MBIOL 231 can be taken spring or summer quarter.*

RETAIL MANAGEMENT

A.A.S. Degree, Certificate: SFCC

Retail management is a two-year specialized management program designed to prepare both men and women for responsible managerial careers in retail merchandising. Closely allied with the fashion merchandising program, emphasis is placed on inventory control procedures and techniques, in-store promotion, budgeting, buying techniques and retail salesmanship.

FIRST YEAR

First Quarter

BT	107	Business Communications[1]	3
FMDSE	111	Fashion Merchandising Seminar[2]	1
FMDSE	267	Cooperative Education Work Experience[2]	1
GBUS	101	Introduction to Business	5
GBUS	103	Basic Business Math and Electronic Calculators	5
MMGT	181	Leadership Training-DEC	1
		Total	**16**

Second Quarter

ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
FMDSE	112	Fashion Merchandising Seminar[2]	1
FMDSE	150	Principles of Retail Merchandising	5
FMDSE	180	Retail Sales Techniques	3
FMDSE	267	Cooperative Education Work Experience[2]	1
MMGT	182	Leadership Training-DEC	1
		Total	**16**

Third Quarter

BT	108	Business Communications[1]	3
BT	272	Business Correspondence	5
FMDSE	113	Fashion Merchandising Seminar[2]	1
FMDSE	267	Cooperative Education Work Experience[2]	1
IS	120	Business Computer Use	3
MMGT	183	Leadership Training-DEC	1
		Electives Group A, B, or C	2
		Total	**16**

SECOND YEAR

Fourth Quarter

FMDSE	224	Principles of Retail Promotion OR	
MMGT	218	Fundamentals of Advertising	5
MMGT	211	Marketing	5
		Courses from requirements or electives Group A, B, or C	5
		Elective Group C	1
		Total	**16**

Fifth Quarter

ACCT	101	Principles of Accounting[3]	5
ECON	201	Introduction to Macroeconomics	5
GBUS	280	Human Relations in Business OR	
MMGT	231	Human Resource Management	5
		Total	**15**

Sixth Quarter

FMDSE	210	Merchandising Management	5
		Courses from requirements or electives Group A, B, or C	12
		Total	**17**

Sufficient elective credits from Group A, B and C below must be obtained throughout the two-year program for graduation requirements of 96 credits.

GROUP A-BUSINESS ELECTIVES:

ACCT	102	Principles of Accounting	5
BT	101	Keyboarding	5
ECON	202	Introduction to Microeconomics	5
ENG	095	Reading Lab	1-5
GBUS	100	Money Management	3
GBUS	205	Business Law	5
GBUS	217	Business Statistics	5
GBUS	280	Human Relations in Business	5
MMGT	101	Principles of Management	5
MMGT	231	Human Resource Management	5
MMGT	270	Conference Preparation Techniques	1-5
SBM	101	How to Start a Small Business	5
		OR Other Business Course approved by the management adviser.	

GROUP B-ELECTIVES:

ART	105	Color and Design	5
FMDSE	161	Merchandise Trends	3
INTDS	170	Elements of Interior Design	5
INTDS	179	History of Interiors I	3
INTDS	180	History of Interiors II	3
		Or Other Home Economics or Art Course approved by the management adviser.	

GROUP C-COMPUTER SOFTWARE ELECTIVES:

CAPPS	102	Introduction to Office	1
CAPPS	110	Word	1
CAPPS	112	Excel	1
CAPPS	114	Access	1

[1] May substitute ENG 101.

[2] Three credits of work experience are required. Must be taken concurrently with seminar.

[3] ACCT 103 and 104 may be substituted for ACCT 101.

Retail Management Certificate

The Retail Management Certificate prepares individuals to manage a variety of retail sales operations or lines of merchandise. Students who complete the ten course Retail Management Certificate program will develop a clear sense of the scope of a career in the field of retail management. The program serves both entry-level job candidates and incumbent employees. The curriculum includes foundational courses in both written and oral communication, business math, human relations, and microcomputer applications. Students also complete specific business and management courses in accounting, management, marketing, retailing, and human resource management. After successful completion of the required coursework, students will receive a Retail Management Certificate. This certificate is endorsed by the Western Association of Food Chains (WAFC).

First Quarter

BT	107	Business Communications[2]	3
FMDSE	150	Principles of Retail Merchandising	5
GBUS	103	Basic Business Math and Electronic Calculators[1]	5
IS 120		Business Computer Use	3
		Total	**16**

Second Quarter

ACCT	101	Principles of Accounting	5
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
BT	108	Business Communications[2]	3
MMGT	231	Human Resource Management	5
		Total	**18**

Third Quarter

MMGT	101	Principles of Management	5
MMGT	211	Principles of Marketing	5
GBUS	280	Human Relations in Business	5
		Total	**15**

49 credits are required for a certificate.

[1] May substitute Math 91 or above

[2] May substitute English 101

SMALL BUSINESS MANAGEMENT

A.A.S. Degree: SFCC

The objectives of this program are to educate students in the techniques and principles of owning, operating and managing a small business, and to make current small business owners more effective and efficient in their operations. This program provides support courses for

other vocational programs by concentrating on specific small business knowledge and skills.

FIRST YEAR

First Quarter

ACCT	101	Principles of Accounting[1]	5
BT	107	Business Communications[2].	3
GBUS	101	Introduction to Business	5
MMGT	111	Mid-Management Seminar	1
		Computer Elective (Information Systems)	1
		Total	**15**

Second Quarter

BT	108	Business Communications[2].	3
CRMGT	140	Financial Statement Analysis	3
GBUS	105	Principles of Leadership[3].	3
GBUS	280	Human Relations in Business	5
MMGT	112	Mid-Management Seminar	1
		Total	**15**

Third Quarter

ACCT	107	Accounts Receivable Procedures	1
GBUS	103	Basic Business Math and Electronic Calculators	5
GBUS	108	eBusiness	2
MMGT	211	Marketing	5
		Computer Elective (Information Systems)	1
		Total	**14**

SECOND YEAR

Fourth Quarter

ACCT	115	Accounting for Current Liabilities	1
BT	272	Business Correspondence	5
FMDSE	224	Principles of Retail Promotion	5
GBUS	205	Business Law	5
		Total	**16**

Fifth Quarter

ACCT	121	Payroll Procedures	3
ECON	100	Fundamentals of Economics[4]	5
SBM	101	How to Start a Small Business	5
SBM	105	Targeting Your Market	2
		Total	**15**

Sixth Quarter

ACCT	122	Business Tax Accounting	1
CRMGT	110	Introduction to Finance	3
ENG	109	Speech Composition AND	
SPCH	101	Introduction to Speech Communication	5
MMGT	101	Principles of Management	5
		Computer Elective (Information Systems)	1
		Total	**15**

90 credits are requires for an A.A.S. degree.

Keyboarding proficiency of 35 wpm expected.

[1] *ACCT 103 and 104 may be substituted for ACCT 101.*
[2] *May substitute ENG 101 for BT 107 and 108.*
[3] *May substitute MMGT 181, 182, 183 for GBUS 105.*
[4] *May substitute ECON 201 for ECON 100.*

SOCIAL SERVICES

A.A.S. Degree: SFCC

The social service program is designed for those who plan to seek employment in social services upon completion of the two-year program, or who wish to transfer to a four-year institution and complete a bachelor's degree.

The social service program leads to:

1. An associate of arts (A.A.) degree that is for those who wish to transfer to a four-year college and complete a bachelor's degree, or

2. An associate in applied science (A.A.S.) degree designed for those who plan to seek employment in social services upon completion of the two-year program.

Those who have completed the A.A.S. program will have acquired the necessary skills to work in various public and private social services programs.

FIRST YEAR

First Quarter

HS	102	Introduction to Human Services	5
HS	136	Improving Interpersonal Communication	5
HSSUB	131	Survey of Chemical Dependency	3
		Elective[1]	5
		Total	**18**

Second Quarter

HS	105	Child Abuse	5
HSGER	101	Introduction to Social Gerontology	5
HSGER	250	Death, Loss and Grief	5
		Total	**15**

Third Quarter

HS	115	Social Policy OR	
HSSOC	115	Social Policy OR	
HS	221	Treatment Theories in Human Services	5
HSGER	115	Multi-Cultural Perspectives in Human Services OR	
HSGER	201	Aging and Personality	5
ENG	101	English Composition	5
		Total	**15**

SECOND YEAR

Fourth Quarter

GBUS	103	Basic Business Math and Electronic Calculators OR	
		Other Math	5
HS	281	Practicum I	5
		Elective[1]	5
		Total	**15**

Fifth Quarter

HS	282	Practicum II OR	
		Elective	5
HSGER	210	Aging and Mental Health OR	
		HS Elective	5
		Elective[1]	5
		Total	**15**

Sixth Quarter

HS	283	Practicum III OR	
		HS Elective	5
		Elective [1]	5
		Elective[1]	5
		Total	**15**

93 credits are required for an A.A.S. degree.

[1] *Elective specified from Transfer Track Elective or HS electives as specified and recommended by advisor.*

SOFTWARE DEVELOPMENT

A.A.S. Degree, Certificate: SCC

The software development program trains students in current web and application development technologies as well as acclimating to change and life-long learning. Software development is constantly changing, so people must be able to adapt quickly and find answers through reading, problem solving, researching techniques and applying existing technology. Graduates from this program have the skills to continue learning, adapt to change and find answers that may not exist upon graduation. Inherent in software development are problem-solving techniques, responsibility, ethics, and, by its nature, global awareness and constant communication with people in our community and around the world.

Admission Prerequisite Requirements:

CIS	110	Introduction to Computer Applications or permission of instructor

Students must maintain a grade of 2.0 in each class.

FIRST YEAR

First Quarter
CIS	111	XHTML Basics	5
CIS	112	Graphic Design for the Web	5
CIS	146	Introduction to Programming	5
ENG	101	English Composition[1]	5
		Total	**20**

Second Quarter
CIS	126	DBMS/SQL	5
CIS	130	Website Design	5
CIS	282	Beginning Java	5
		Total	**15**

Third Quarter
CIS	114	JavaScript	5
CIS	283	Advanced Java	5
MATH	115	Math for the Liberal Arts[1]	5
		Total	**15**

SECOND YEAR

Fourth Quarter
CATT	241	Project Management Applications	2.5
CIS	256	.Net Application Development	5
CIS	284	Ruby on Rails	5
MMGT	242	Project Management	2.5
		Total	**15**

Fifth Quarter
CIS	147	Emerging Technology[1]	5
CIS	258	ASP.NET	5
CIS	272	Agile Software Development	5
		Total	**15**

Sixth Quarter
BT	160	Job Preparation Techniques[1]	3
CIS	276	Software Development Capstone	5
SPCH	102	Interpersonal Communication[1]	5
		Total	**13**

93 credits are required for an A.A.S. degree.

1 This related education course may be substituted with any course or courses approved by the instructional dean.

Web Design Certificate
CIS	111	XHTML Basics	5
CIS	112	Graphic Design for the Web	5
CIS	130	Website Design	5
		Total	**15**

15 credits are required for a certificate.

.Net Developer Certificate
CIS	126	DBMS/SQL	5
CIS	256	.Net Application Development	5
CIS	258	ASP.NET	5
		Total	**15**

15 credits are required for a certificate.

Computer Science Certificate
CIS	146	Introduction to Programming	5
CIS	282	Beginning Java	5
CIS	283	Advanced Java	5
		Total	**15**

15 credits are required for a certificate.

Web Developer Certificate
CIS	114	JavaScript	5
CIS	258	ASP.NET	5
CIS	272	Agile Software Development	5
CIS	284	Ruby on Rails	5
		Total	**20**

20 credits are required for a certificate.

SURGICAL TECHNOLOGY

A.A.S. Degree: SCC

The surgical technology program prepares students to function in cooperation with the surgeon and nurses in the operating room performing duties that are vital for the safety and care of surgical patients. Students must have knowledge and skills in surgical aseptic techniques for preparation and use of materials during a surgical procedure. Students also must be able to relate to patients and other people in the field. Using reasonable judgment when working in emergency surgical situations is required.

At the completion of the program, students will be able to accept responsibility expected of the surgical technologist as a beginning staff employee in the operating room. Upon completion of the program, students will be eligible to write the National Certifying Examination for Surgical Technologists for qualification as a certified surgical technologist (CST).

The surgical technology program is accredited through Commission on Accreditation of Allied Health Education Programs (CAAHEP). 1361 Park Street, Clearwater, FL 33756; Phone: (727) 210-2350; Website: www.caahep.org.

Admission Prerequisites/Requirements:
- High school diploma or GED certificate
- MATH 92 or 96 or a passing score on the assessment test
- Appropriate scores in one of the following: ASSET or Compass

Program Requirements:
- Each required course for graduation must be completed with a grade of 2.0 or better before proceeding to the next quarter.
- A student may repeat a surgical technology class only once, and it must be repeated within two years.
- The surgical technology program must be completed within a three-year period.
- Students can enter into the third or fourth quarter if they qualify for advanced standing and space is available. Students requesting placement into the program in the second year must pass a comprehensive test for each class or take SURG 202, 203, and 206 even if they had previously passed the courses.

Program Recommendations:
- Computer Skills
- Active email account

FIRST YEAR

First Quarter
BIOL	101	General Biology	5
SPCH	102	Interpersonal Communication	5
SURG	100	Introduction to Surgical Technology	2
SURG	125	Medical Terminology	5
		Total	**17**

Second Quarter
A-P	242	Human Anatomy and Physiology	5
CIS	110	Introduction to Computer Applications	5
ENG	101	English Composition	5
SURG	120	Disease Transmission and Control	3
		Total	**18**

Third Quarter
A-P	243	Human Anatomy and Physiology	5
MATH	100	Vocational Technical Mathematics	3
SURG	101	Surgical Procedures	5
SURG	104	Central Service Clinical	1
SURG	111	Technical Skills I	3
		Total	**17**

SECOND YEAR

Fourth Quarter
SURG	105	Blood-borne Pathogens and HIV/AIDS	1
SURG	202	Surgical Procedures	5
SURG	212	Technical Skills II	4

SURG   254   Operating Room Practicum 2
        Total **12**

Fifth Quarter
SURG   132   Ethics and Professionalism in Health. 2
SURG   203   Surgical Procedures 4
SURG   206   Perioperative Care of the Patient 4
SURG   255   Operating Room Practicum 5
        Total **15**

Sixth Quarter
SURG   250   Surgical Seminar 3
SURG   256   Operating Room Practicum 10
        Total **13**

92 credits are required for an A.A.S. degree.

TELECOMMUNICATIONS OFFICER

Certificate: SCC

The telecommunications officer certificate program consists of training suitable for students in criminal justice, fire science, and other departments involved in emergency calls for services. The program prepares students to receive, relay, and dispatch emergency calls; provide assistance to the public via telephone or in person; and operate a variety of communications equipment. The maintenance of accurate and precise recordkeeping is also stressed throughout the program.

In order to enter the program, students must prove keyboarding proficiency at 35 wpm and pass a multi-task evaluation test which will include testing the applicant's ability to manage stressful situations that may occur on-the-job. For further information, contact a program instructor or a counselor.

First Quarter
CIS   110   Introduction to Computer Applications. 5
CJ   209   Human Relations. 3
ENG   101   English Composition. 5
SPCH   102   Interpersonal Communication 5
        Total **18**

Second Quarter
CATT   122   Microsoft Access I 2.5
CATT   123   Microsoft Access II. 2.5
CJ   150   Criminal Justice Report Writing 5
CJ   212   Professional Development 1
CJ   266   Cooperative Education Seminar AND. 1
CJ   267   Cooperative Education Work Experience OR 6
CJ   288   Cooperative Education Work Experience (No Seminar) 7
        Total **18**

36 credits are required for a certificate.

VASCULAR TECHNOLOGY

A.A.S. Degree: SCC

Vascular Technology is an allied health profession in which practitioners perform diagnostic and monitoring procedures using sound waves. The vascular sonographer performs examinations at the request or direction of a physician. Through subjective sampling and/or recording, the vascular sonographer proceeds with the examination to create an easily definable foundation of data from which a correct anatomic and physiologic diagnosis may be established for each patient.

The various types of ultrasound imaging equipment require a highly skilled sonographer to obtain the imaging information or other data required. The vascular sonographer must obtain appropriate history, physical findings, and pertinent laboratory data to adapt the imaging techniques to obtain comprehensive and diagnostic information.

Students may change programs one time within related imaging programs with permission of the faculty. Students must earn a grade of 2.0 or higher in each class in order to proceed to the next quarter.

Program Prerequisites:
- Anatomy and Physiology 242 and 243:
- Math 099
- Chemistry 161
- Biology 101
- All math and science prerequisites must have been completed within the last five years with a grade of 2.0 or better.
- Students may repeat a professional class once, but it must be repeated within two years.

Related Education Courses

FIRST YEAR

First Quarter
CHEM   120   Organic and Biochemistry for the Health Sciences. . . . 5
ICT   114   Cardiovascular I 4
NCT   113   Electrophysiology I. 4
VASC   112   Vascular Fundamentals 4
        Total **17**

Second Quarter
ICT   124   Cardiovascular II 4
NCT   123   Electrophysiology II 4
PHYS   120   Fundamentals of Medical Physics 5
SPCH   127   Leadership Development 3
VASC   122   Vascular Procedures. 4
        Total **20**

Third Quarter
ICT   134   Invasive Cardiovascular Fundamentals 5
NCT   133   Noninvasive Cardiovascular Fundamentals 5
PHYS   121   Medical Physics II 4
VASC   132   Cardiovascular Physiology 5
        Total **19**

Fourth Quarter
NCT   141   Computers for the CV Technologist 3
NCT   142   Noninvasive Cardiovascular Clinical 4
VASC   143   Noninvasive Cardiovascular Clinical Observation 6
        Total **13**

SECOND YEAR

Fifth Quarter
ENG   101   English Composition. 5
VASC   252   Advanced Vascular Techniques 9
        Total **14**

Sixth Quarter
VASC   262   Vascular Clinical I. 13
        Total **13**

Seventh Quarter
VASC   272   Vascular Clinical II 13
        Total **13**

109 credits are required for an A.A.S. degree.

A 2.0 grade point must be maintained quarterly in each course before proceeding to the next quarter.

VISION CARE

A.A.S. Degree, Certificate: SCC

VISION CARE TECHNOLOGY
VISION CARE SPECIALIST

A career in vision care offers a variety of job opportunities within the health care field. The one-year certificate program provides graduates with the skills necessary to assist practitioners of optometry, ophthalmology and opticianry to provide a full scope of vision care. The aging population needs have stimulated technical advancements in ophthalmic lens materials, new contact lens design and increased medical/surgical treatment procedures. This factor provides a special opportunity for those individuals who enjoy the challenge of keeping abreast of change.

Students may earn a vision care specialist certificate by taking the three-quarter professional vision care curriculum. Graduates are prepared to sit for the nationally recognized Assistants Registry Exam (AOA). Those students wishing to pursue a vision care technology A.A.S. degree may take the additional three quarters of liberal arts curriculum.

Admission Prerequisites/Requirements:
- High school diploma or GED certificate
- Appropriate ASSET or Compass scores

Admissions Recommendations:
- BIOL 101
- CHEM 161
- MATH 99
- Computer Skills
- Active email account

FIRST YEAR

First Quarter
ENG	101	English Composition OR	
ENG	120	Applied Technical Writing for Vocations.	5
VCT	110	Ophthalmic Optics	5
VCT	111	Ocular Anatomy and Physiology	5
VCT	112	Introduction to Pretesting	4
VCT	130	Mechanical Optics	3
		Total 22	

Second Quarter
VCT	123	Ophthalmic Dispensing	5
VCT	124	Ocular Pharmacology	2
VCT	125	Advanced Pretesting	6
VCT	126	Contact Lenses	5
		Total 18	

Third Quarter
VCT	137	Vision Care Specialties	2
VCT	138	Vision Care Practicum	6
VCT	139	Ophthalmic Business Management	4
		Total 12	

In addition to the above listed classes, successful completion of the following classes is required in order to receive the A.A.S. degree. They may be taken at any time outside of the regular hours required for the vision care program. It is the student's responsibility to schedule these classes.

Each required course for the degree and/or the certificate must be completed with a 2.0 grade or better before proceeding to the next quarter.

Liberal Arts Curriculum (Optional)

SECOND YEAR

Required Courses
CIS	110	Introduction to Computer Applications[1]	5
ISFTY	111	Industrial First Aid[1]	2
MATH	099	Intermediate Algebra[1]	5
SPCH	102	Interpersonal Communication[1]	5

Students may choose one of the following courses
BIOL	101	General Biology[1]	5
CHEM	100	Survey of Chemistry[1]	5
CHEM	161	General Chemistry for Health Sciences[1]	5
PHYS	101	General Physics[1]	5
PHYS	120	Fundamentals of Medical Physics[1]	5

Students may choose one of the following courses
ACCT	101	Principles of Accounting[1]	5
ACCT	151	College Accounting I[1]	5
MMGT	205	Small Business Planning[1]	5

Students may choose one of the following courses
PHIL	101	Introduction to Philosophy[1]	5
PSYCH	101	Introduction to Psychology[1]	5
SOC	101	Introduction to Sociology[1]	5
SPCH	220	Intercultural Communication[1]	5

Students may choose 8 credits of electives numbered 100 or above.
Electives	8

92 credits are required for an A.A.S. degree and 52 credits are required for a certificate.

Students may repeat a vision technology course once, but it must be repeated within two years.

[1] *These courses may be substituted by any course or combination of courses approved by the instructional dean.*

WATER RESOURCES TECHNOLOGY

A.A.S. Degree: SCC

The water resources technology program is designed to prepare students for positions in hydrology and water quality for local, state and federal agencies, and private industry.

FIRST YEAR

First Quarter[1]
AGGEN	151	Agriculture Shop Skills	4
NATRS	112	Natural Resources Mathematical Applications[2]	5
WATER	109	Introduction to Water Resources	5
WATER	120	Hydrologic Technical and Field Reports[2]	5
WATER	128	Occupational Preparation and Experience[2]	1
		Total 20	

Second Quarter
NATRS	122	Natural Resources Trigonometric Applications[2]	5
NATRS	220	Introduction to Geographic Information Systems for Natural Resources[3].	4
WATER	129	Occupational Preparation and Experience	2
WATER	132	Hydrologic Field Projects[1]	2
WATER	208	Water Data and Records Analysis.	5
		Total 18	

Third Quarter
NATRS	204	Maps and Aerial Photo Interpretation	5
WATER	133	Hydrologic Field Projects[1,2]	2
WATER	205	Surveying[4].	5
WATER	210	Hydrologic Measurement	5
		Total 17	

SECOND YEAR

Fourth Quarter
NATRS	217	Freshwater Fisheries Biology.	5
WATER	110	Hydrogeology.	5
WATER	212	Water Rights and Laws	5
WATER	214	Advanced Hydrologic Records	5
WATER	228	Occupational Preparation and Experience	1
WATER	231	Hydrologic Field Projects[1]	2
		Total 23	

Fifth Quarter
NATRS	230	Global Positioning Systems.	3
WATER	111	Groundwater Systems	5
WATER	209	Water Quality	5
WATER	218	Hazardous Materials	3
WATER	229	Occupational Preparation and Experience	2
WATER	232	Hydrologic Field Projects[1]	1
		Total 19	

Sixth Quarter
ENVSC	211	Weather and Climate.	5
NATRS	221	Applications in Geographic Information Systems	5
WATER	213	Advanced Water Quality	5
WATER	216	Watershed Restoration	5
WATER	233	Hydrologic Field Projects[1]	2
		Total 22	

119 credits are required for an A.A.S. degree.

[1] *WATER 131 may be taken in the first quarter. Students are required to complete a minimum of five of the six field projects: WATER 131, 132, 133, 231, 232, 233.*

[2] *These related education requirements may be met by any course or combination of courses approved by the instructional dean.*

[3] *Students must pass a competency test.*

[4] *May be substituted with NATRS 205.*

WEB DESIGN

A.A.S. Degree: SFCC

The web design program is a two-year course based upon the graphic design program. Students study the fundamentals of design, drawing, typography, color and form, problem solving, critical thinking and 3D and 2D animation. The use of computers and their operating systems is emphasized. Competency is achieved on the predominant graphics programs.

Specific to the Internet, students design interfaces and structure information to create Web pages and sites. Graphics imagery and animations tailored to the Web will be constructed, paying close attention to file formats, color control and compression techniques. Web pages will be programmed using HTML (hypertext markup language). An introduction to several programming languages designed for the Internet aid in designing functions and interactivity in Web sites.

FIRST YEAR

First Quarter

GRDSN	101	Design Process I	2
GRDSN	102	Design Technology I	2
GRDSN	103	Design Projects I	1
GRDSN	104	Design Lab I	2
GRDSN	105	Drawing for Graphic Designers	2
GRDSN	109	History of Design	4
GRDSN	156	Illustrator I	2
GRDSN	163	InDesign I	2
		Total	**17**

Second Quarter

ART	105	Color and Design	5
GRDSN	111	Design Process II	2
GRDSN	112	Design Technology II	2
GRDSN	113	Design Projects II	1
GRDSN	114	Design Lab II	2
GRDSN	115	Drawing for Communication	2
GRDSN	158	PhotoShop I	2
GRDSN	172	Dreamweaver	2
		Total	**18**

Third Quarter

ENG	105	Pro/Tech: Basic Writing	5
GBUS	102	Math Skills for Business	3
GRDSN	121	Design Process III	2
GRDSN	122	Design Technology III	2
GRDSN	123	Design Projects III	1
GRDSN	124	Design Lab III	2
GRDSN	125	Computer Drawing	2
		Total	**17**

SECOND YEAR

Fourth Quarter

GENST	109	Applied Critical Thinking	3
GRDSN	126	Web Production	2
GRDSN	167	Fireworks	2
GRDSN	171	Flash	2
GRDSN	238	3-D Modeling and Animation I	3
IS	143	Operating System Fundamentals	2
IS	210	Internet Programming I	4
		Total	**18**

Fifth Quarter

GRDSN	215	Web Process V	2
GRDSN	216	Web Technology V	2
GRDSN	217	Web Projects V	1
GRDSN	218	Web Lab V	4
GRDSN	235	Multimedia Technology I	3
HS	136	Improving Interpersonal Communication	5
		Total	**17**

Sixth Quarter

GRDSN	225	Web Process VI	2
GRDSN	226	Web Projects VI	1
GRDSN	227	Web Lab VI	4
GRDSN	266	Cooperative Education Seminar	1
GRDSN	267	Cooperative Education Work Experience	3-5
		Elective[1]	3-5
		Total	**14-18**

101-105 credits are required for an A.A.S. degree.

[1] *See department for listing of approved electives.*

WELDING AND FABRICATION

Certificate: SCC

Welding is one of the most common and dependable methods of joining materials together. Fabrication is the process of blueprint reading, layout, cutting and preparing materials for assembly.

The competency-based welding and fabrication program trains the student in the safe and correct procedures used in shielded metal-arc welding, oxy-acetylene welding, MIG and TIG welding, and air arc and plasma cutting. Course content also includes the safe use and care of hand and power equipment found in welding and fabrication shops. Some of the equipment includes overhead cranes, grinders, power saws, ironworker, cold saws and drill presses.

The student will be prepared for entry into many trade and industry opportunities, including construction, aerospace, automotive, heavy equipment, machinist, ship building and agriculture. This is only a small cross-section of job opportunities available to the student who successfully completes the program.

First Quarter

APLED	121	Applied Written Communication[1]	4
WELD	113	Welding Math	2
WELD	114	Introduction to Blueprint Reading	3
WELD	115	Introduction to Fabrication	2
WELD	116	Shielded Metal Arc Welding Theory	2
WELD	117	Shielded Metal Arc Welding Applications	7
		Total	**20**

Second Quarter

APLED	125	Employment Preparation[1]	3
WELD	123	Intermediate Blueprint Reading	2
WELD	124	Advanced Shielded Metal Arc Welding Theory	2
WELD	125	Advanced Shielded Metal Arc Welding Applications	6
WELD	126	Intermediate Fabrication	5
		Total	**18**

Third Quarter

ISFTY	111	Industrial First Aid	2
WELD	133	Advanced Blueprint Reading	2
WELD	134	Specialty Welding Theory	4
WELD	135	Specialty Welding Applications	8
WELD	136	Advanced Fabrication	2
		Total	**18**

56 credits are required for a certificate.

[1] *This related education requirement may be met by any course or combination of courses approved by the instructional dean.*