

PROGRAM PLANNING GUIDE

COMPUTER PROGRAMMING Associate in Technical Arts

PROGRAM DESCRIPTION: The ATA in Computer Programming is designed for persons interested in writing computer programs in various languages, such as Visual Basic, C# and Java, both stand-alone and web based. Consideration is also given to database connectivity.

Computer programmer duties include some or all of the following: analysis of problems using business concepts, design of software solutions, application of industry standard tools and techniques for software development and documentation and user training requiring sound verbal and written skills.

PROGRAM OUTCOMES: South Puget Sound Community College believes that all students need to develop a broad range of abilities that will not only make them more effective in their professional pursuits but will enhance their capacity to relate well to others in their daily lives. Therefore students who complete an ATA in Computer Programming will:

- Demonstrate the following skill standards:
 - Effectively plan, create and debug programs.
 - Apply database and programming concepts in various situations.
 - Use industry standard programming tools and techniques.
- Gather information about, understand and explain clearly to others concepts relevant to successful performance in the field of computer programming.
- Think logically and critically and apply these thinking skills to the computer programming field.
- Communicate effectively in oral, written and graphic form.
- Apply fundamental quantitative and computation skills.
- Understand themselves and others as they interact in a global environment.
- Demonstrate skills in dealing with differences and managing interpersonal relationships.
- Understand fundamental ethical issues and their related responsibilities and liabilities.

PROGRAM INFORMATION/CONTACTS:

Admission:

Applications for admission and financial aid are available in Building 25, Office of Enrollment services, or call (360) 596-5241. Information is also available at the college website: www.spscc.ctc.edu. Students are accepted into the Computer Programming program every quarter.

Length of Program:

Full-time students typically complete this program in six quarters, after basic skills are complete.

Costs:

Tuition is subject to change by the State Legislature. Detailed tuition information is available in the quarterly class schedule. Tuition and fees do not include the costs of textbooks and supplies.

Advisors:

Rand Riness, (360) 596-5382, Steve Kollmansberger, (360) 596-5307 and Richard Hoagland, (360) 596-5313.

Special Program Note:

Students entering the programming are expected to have successfully completed the following courses or their equivalents:

- CIS 101 Keyboarding 1
- CIS 108 Introduction to Microsoft Office
- CIS 123 Introduction to Windows
- MATH 099 Intermediate Algebra

PROGRAM REQUIREMENTS: An Associate in Technical Arts degree will be awarded upon successful completion of a minimum of 90 credits in courses numbered 100 or above. All core and general education list requirements must be met.

Basic Skills Requirements:

English, Reading or Math may be required based on placement testing. Students are encouraged to complete basic skills requirements at the beginning of their education. Basic skills deficiencies must be completed prior to graduation.

ENGL 097	Basic Writing II	5 credits
READ 097	Analytical Reading II	5 credits
MATH 099	Intermediate Algebra	5 credits

Core Requirements:

CIS 145 Introduction to Access	5 credits
CIS 160 Introduction to Programming Using Visual Basic	5 credits
CIS 166 Programming with Visual Basic	5 credits
CIS 168 Programming Logic	5 credits
CIS 182 Structured Query Language (SQL)	5 credits
CIS 184 Creating Web Pages	5 credits
CIS 185 Web Scripting	5 credits
CIS 169 Requirements Analysis	3 credits
CIS 269 Software Maintenance	5 credits
CIS 284 Web Application Development	5 credits
CNA 130 Introduction to Linux/Unix	5 credits
CS 142 Object-Oriented Programming I	5 credits
CS 143 Object-Oriented Programming II	5 credits
CORE CREDITS	63 credits

To complete the Computer Programming Degree, choose one of the two tracks below:

Application Track:

CIS 189 XML	5 credits
CIS 282 SQL Projects	5 credits
Choose one:	
CIS 266 Developing Applications in Visual Basic	5 credits
OR	
CIS 242 C#	5 credits
Choose two courses from the following list:	
CIS 237 Dreamweaver MX	4 credits
CIS 239 Graphics on the Web Using Photoshop	4 credits
CIS 245 Developing Applications in Access	5 credits
CIS 264 C++ Programming	5 credits
CIS 290 Cooperative Work Experience/Internship	3 credits
TRACK CREDITS	23-25 credits

U.W. Tacoma Transfer Track (AAS-T)

MATH 108 Introduction to Probability and Statistics	5 credits
MATH& 151 Calculus I (formerly MATH 123)	5 credits
PHYS& 221 Engineering Physics I (formerly PHYS 201)	5 credits
PSYC 116 Psychology of Human Relations	5 credits
TRACK CREDITS	20 credits

General Education Requirements:

Complete a minimum of three credits from each of the four categories: Reading/Writing; Listening/Speaking; Computation; and Human Relations. A complete list of courses that satisfy the general education requirements may be obtained from the Advising Center in Building 25.

Reading/Writing		5 credits
ENGL& 101	English Composition I (formerly WRIT 101)	
Speaking/Listening		5 credits
CIS 210	Business Communication	
OR		
ENGL& 235	Technical Writing (formerly TCOM 106)	
Computation		5 credits
CIS 168	Programming Logic (Completed in Core)	
Human Relations		3 or 5 credits
CIS 109	Human Dimensions in the Office	
OR		
CMST& 230	Small Group Communication (formerly SPCH 115)	

Cooperative Work Experience/Internships:

Cooperative Work Experience is the internship program at South Puget Sound Community College and offers students an opportunity to receive college credit for paid or unpaid work experience related to their educational goals. This program gives students an opportunity to apply their skills while still in college.

The Cooperative Work Experience/Internship Office number is (360) 596-5359. Please call for an appointment.

For more information, contact the Cooperative Work Experience/Internship office at (360) 596-5359 (Bldg 22-204) or at <http://www.spscc.ctc.edu/internship/>

DIVERSITY REQUIREMENT: South Puget Sound Community College requires all new students seeking an Associate Degree to complete a “diversity” course which meets the college criteria for listing as a diversity course and has been approved for such listing by the college Instruction Council prior to the student enrolling in the class.

The diversity requirement may be completed within the General Education requirements by choosing one of the bolded courses listed under the Speaking/Listening category or the Human Relations category.

CERTIFICATE OPTIONS: If a student is interested in specializing, the following certificate could be earned.

Web Design

CIS 145 Introduction to Access	5 credits
CIS 160 Introduction to Programming Using Visual Basic	5 credits
CIS 182 Structured Query Language (SQL)	5 credits
CIS 184 Creating Web Pages	5 credits
CIS 185 Web Scripting	5 credits
CIS 235 Silverlight or CIS 237 Dreamweaver MX or CIS 284 Developing Applications for the Web	4 or 5 credits
TOTAL CREDITS	29-30 credits

OFFICE OF CIVIL RIGHTS COMPLIANCE STATEMENT: South Puget Sound Community College’s equal opportunity policy prohibits discrimination in our services and in employment against any person on the basis of race or ethnicity, creed, color, national origin, sex, marital status, sexual orientation, age, religion, Vietnam-era or disabled veteran status, or the presence of any sensory, physical or mental disability except in the case of a bona fide occupation qualification. South Puget Sound Community College is an equal opportunity/affirmative action employer and complies with the Americans with Disabilities Act (ADA).

Effective: Summer 2008

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