

# ASSOCIATE IN COMPUTER SCIENCE - CNA TRACK

## Cybersecurity and Network Administration

(93 credits)

## Program Description

Put your passions to work in one of the most relevant and in-demand industries—Information Technology. Become a BIM technician, game developer, civil engineer, cybersecurity expert, or IT network engineer and work in virtually any industry and any country. Take your next step into our Information Technology Pathway.

Work in a field that changes quickly, offers frequent opportunities to grow and problem-solve, and immerses you in technology. As a student of computer science at SPSCC, you'll find high-paying employment opportunities in a wide range of industries. Become a part of our 30-year track record of serving our community and helping our students find employment – all at a fraction of the cost of a private institution or a coding “boot camp”.

## Career Opportunities

Completion of one of the Associate in Computer Science degree tracks prepares students for entry-level employment with state and local government agencies, the healthcare sector, school districts, libraries, and private businesses that work as service providers to public and private clients.

- Network Administrator
- Computer Hardware Engineer
- Data Manager
- Web Developer

## Additional Costs

Include textbooks plus fees to support information technology equipment and system upgrades. Please contact faculty to get a list of the items and the costs.

## 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.

- Prepares students for transfer to computer science and related majors at universities and colleges in Washington State, as outlined in the Spring 2016 Statewide Computer Science DTA Major Related Program (MRP) Agreement

The SPSCC college-wide abilities are embedded into each program:

- Effective Communication
- Information Literacy
- Analytical Reasoning
- Multicultural Awareness
- Social Responsibility

## Courses by Quarter

In planning this degree students need to work closely with their faculty advisor and the transfer institution so that the science credits within the degree create a seamless passage to the transfer institution.

Although the Computer Science DTA/MRP degree transfers to four-year colleges and universities in Washington State, it may not meet specific department requirements. Based on placement testing or self-placement, students may need to complete basic skills and/or pre-college English and mathematics. Often, pre-college courses are prerequisites for college-level courses that are necessary for graduation. \*Students who do not test, place, or transfer into MATH& 151 (Calculus I) will need to take precalculus (MATH& 141 and/or MATH& 142) as part of preparatory/pre-college work for this degree.

To earn an Associate in Computer Science DTA/MRP degree, all courses taken must be:

- At college level (numbered 100 or above).
- A class can only count once toward General Education requirements. For example, IIS 125 will satisfy either HUMANITIES or SOCIAL SCIENCE course requirements, but not both.
- A cumulative grade point average of 2.0 or above in all college-level courses required.
- Although this degree is a general transfer degree, South Puget Sound Community College has provided pathways and associated recommended courses for ease of student selection based upon a student's career interest. Please review the pathway maps for recommended courses and course sequences.

## Courses by Quarter

| Code                         | Title                                  | Credits |
|------------------------------|--|---------|
| <b>Quarter 1</b>             |  |         |
| Transition Studies           |  |         |
| <b>Quarter 2</b>             |  |         |
| AMATH 097                    | Corequisite Intermediate Algebra       | 7       |
| ENGL 090                     | Integrated Reading and Writing I       | 5       |
| or ENGL 095                  | Integrated Reading and Writing II      |         |
| CCS 101                      | Pathways to Success                    | 3       |
| <b>Quarter 3</b>             |  |         |
| AMATH 141                    | Corequisite Precalculus I <sup>1</sup> | 8       |
| ENGL 098                     | Transitional English Composition       | 5       |
| or ENGL& 101                 | English Composition I                  |         |
| CNA 100                      | Introduction to Networking             | 5       |
| <b>Quarter 4</b>             |  |         |
| MATH& 142                    | Precalculus II                         | 5       |
| CNA 101                      | Cisco I                                | 5       |
| CNA 120                      | Command Line Interface                 | 5       |
| <b>Quarter 5</b>             |  |         |
| PHIL& 120                    | Symbolic Logic                         | 5       |
| CNA 122                      | Microsoft Server                       | 5       |
| Select one of the following: |  |         |
|                              |  | 5       |

|                              |  |   |
|------------------------------|--|---|
| CMST& 210                    | Interpersonal Communication: Diversity |   |
| CMST& 230                    | Small Group Communication: Diversity   |   |
| CMST& 240                    | Intercultural Communication: Diversity |   |
| <b>Quarter 6</b>             |  |   |
| PHIL& 115                    | Critical Thinking                      | 5 |
| CNA 210                      | Introduction to Network Security       | 5 |
| ENGL& 235                    | Technical Writing                      | 5 |
| <b>Quarter 7</b>             |  |   |
| CS 142                       | Object-Oriented Programming I          | 5 |
| CNA 130                      | Introduction to Linux/Unix             | 5 |
| Select one of the following: |  | 5 |
| ECON& 201                    | Micro Economics                        |   |
| POLS& 202                    | United States Government               |   |
| POLS& 203                    | International Relations                |   |
| <b>Quarter 8</b>             |  |   |
| CS 143                       | Object-Oriented Programming II         | 5 |
| MATH& 146                    | Introduction to Statistics             | 5 |
| Select one of the following: |  | 5 |
| ENVS& 100                    | Survey of Environmental Science        |   |
| ENVS 102                     | Climate Change & Society               |   |
| ENVS 203                     | Climate and Energy Solutions           |   |

<sup>1</sup> Some students may place directly into MATH& 141.

## Pathway Maps

South Puget Sound Community College has provided pathways and associated recommended courses for ease of student selection based upon a student's career interest. Please review the pathway maps for required and recommended courses.

**Computer Science**  
Associate in Computer Science: Cybersecurity and Network Administration track  
93 credits

| Qtr. 1  | Qtr. 2  | Qtr. 3  | Qtr. 4  | Qtr. 5   | Qtr. 6  | Qtr. 7  | Qtr. 8  |
|---|---|---|---|--|---|---|---|
| <b>Transition Studies</b>   | AMATH 097 (5cr)<br>Corequisite Intermediate Algebra<br><br>Includes PHIL& 115<br>co-requisite<br>MATH 098<br>MATH 097 | AMATH 141 (5cr)<br>Corequisite Precalculus I<br><br>(Includes PHIL& 115, co-requisite)<br>MATH 099<br>*MATH& 141<br><br>*Some students may place directly into MATH& 141. | MATH& 142 (5cr)<br>Pre-Calculus II  | (Humanities, required)<br>PHIL& 120 (5cr)<br>Symbolic Logic<br>Spring only | PHIL& 115 (5cr)<br>Critical Thinking<br>Fall  | CS 142 (5cr)<br>Object-Oriented Programming I<br>Fall, Winter only  | CS 143 (5cr)<br>Object-Oriented Programming II<br>Winter, Spring only |
| ENGL 090 (5cr)<br>Integrated Reading and Writing I<br>ENGL 095 (5cr)<br>Integrated Reading and Writing II | ENGL 098 (5cr)<br>Transitional English Composition<br>ENGL 101 (5cr)<br>English Composition I                         | CNA 120 (5cr)<br>Command Line Interface<br>Winter, Spring only  | CNA 122 (5cr)<br>Microsoft Server<br>Spring, Fall only  | CNA 210 (5cr)<br>Introduction to Network Security<br>Fall only             | CNA 130 (5cr)<br>Intro to Linux/Unix<br>Fall, Winter only   | (Computation, required)<br>MATH& 146 (5cr)<br>Introduction to Statistics  |   |
| CCS 101 (3cr)<br>Pathways to Success  | CNA 100 (5cr)<br>Introduction to Networking<br>Fall, Winter only  | CNA 101 (5cr)<br>Cisco I<br>Winter, Spring only   | Choose One (5cr):<br>(Humanities/ Diversity, recommended)<br>CMST& 210 (5cr)<br>Interpersonal Communication: Diversity<br>CMST& 230 (5cr)<br>Small Group Communication: Diversity<br>CMST 240 (5cr)<br>Intercultural Communication: Diversity | ENGL& 235 (5cr)<br>Technical Writing                                       | (Social Science, recommended)<br>ECON& 201 (5cr)<br>Micro-Economics<br>POLS& 202 (5cr)<br>American Government<br>POLS& 203 (5cr)<br>International Relations | Choose One (5cr):<br>(Natural Science, recommended)<br>ENVS& 100 (5cr)<br>Survey of Environmental Science<br>ENVS 102 (5cr)<br>Climate Change & Society<br>ENVS 203 (5cr)<br>Climate and Energy Solutions |   |