

**PROGRAM REVISION FORM**

**Program Title:** Information Technology

**Program Type:** \_\_\_AAS \_\_\_AAS-T \_\_\_AST XATA \_\_\_Certificate \_\_\_Other

**Revised Catalog Description** (one paragraph):

Unchanged – see attached

**Requested by:** Bernice Portervint \_\_\_\_\_ **Date:** April 24, 2014

**Dean of Academics:** \_\_\_\_\_ **Date:** \_\_\_\_\_

*\* Attach copy of program description as in current catalog*

*\* Attach copy of revised program, marking changes. New courses must be approved prior to approval of revised program.*

**Rationale for Changes:** Incorporation of foundational courses into program of study

**FORM MUST BE ACCOMPANIED BY PROGRAM OUTCOMES**

*Approval Signatures:*

\_\_\_\_\_  
*Curriculum Committee Chair*

\_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Vice President for Instruction and Student Services*

\_\_\_\_\_  
*Date*

## Associate of Technical Arts in Information Technology

This program of study is designed to prepare students for entry-level and intermediate-level employment in several information technology fields. Students can focus their attention beyond the core IT classes to an emphasis in computer repair and support, network support and administration, micro-controller/robotics or web page development. Classes are oriented toward training technicians for tribal, government, business and corporate environments. Students completing this degree program can also expect to work toward and complete some of the industry certifications demanded by employers in this competitive job market. Recipients of this degree can transfer directly into Evergreen State College's BA program in Computer Information Systems.

### NORTHWEST INDIAN COLLEGE REQUIREMENTS

HMDV 110	Introduction to Successful Learning (NE)	4
CMPS 101	Introduction to Computers or above (TE)	3
CMST 101 OR	Introduction to Oral Communication (CS) OR	
CMST 210 OR	Interpersonal Communication (CS, HT) OR	4
CMST 220	Public Speaking (CS, HT)	
<b>TOTAL NORTHWEST INDIAN COLLEGE REQUIREMENTS</b>		<b>11</b>

### NORTHWEST INDIAN COLLEGE FOUNDATIONAL REQUIREMENTS

CSOV 101	Introduction to Cultural Sovereignty (HT)	5
CSOV 102	The Language of Our Ancestors (HT) or approved Native language courses <sup>1</sup>	5
CSOV 120	Reclaiming Our History (SS)	5
<b>TOTAL NORTHWEST INDIAN COLLEGE FOUNDATIONAL REQUIREMENTS</b>		<b>15</b>

<sup>1</sup> One or more Native language courses totaling at least 5 credits. Consult with an advisor regarding satisfying general education requirements. Requires approval by the Dean of Academics and Distance Learning.

### GENERAL EDUCATION REQUIREMENTS

ENGL 101	English Composition I (CS)	5
MATH 190	Vocational Mathematics or course meeting AAS QS requirement	5
Humanities Distribution	- 5 cr. requirement met in Foundational Requirements	0
Social Science Distribution	- 5 cr. requirement met in Foundational Requirements	0
Natural Science Distribution	- 5 cr. required. Choose course meeting AAS Natural Science requirement	5
<b>TOTAL GENERAL EDUCATION REQUIREMENTS</b>		<b>15</b>

### CORE PROGRAM REQUIREMENTS

CMPS 104	Operating Systems I: Installation and Troubleshooting	3
CMPS 105	Software I: Applications for Computer Professionals	3
CMPS 116	Microsoft Office I	3
CMPS 117	Microsoft Office II	3
CMPS 140	Networking I	3
CMPS 160	Assembly, Maintenance and Diagnostics	4
CMPS 170	Web Page Development I	3
CMPS 205	Software II: Adv Applications for Cmptr Professionals	3
CMPS 225	Introduction to Programming	4
CMPS 197	Internship/Practicum	6
CMPS 260 OR	Capstone Project OR	
CMPS 297	Internship/Practicum in Computers	5
<b>TOTAL CORE PROGRAM REQUIREMENTS</b>		<b>40</b>

**ELECTIVES** (total of a group of three for 9 credits from one of the following options)

#### Computer Maintenance and Repair Option

CMPS 204	Operating Systems II	3
CMPS 270	Assembly, Maintenance and Diagnostics II	3
CMPS 271	A+ Exam Preparation	3

#### Network Administration Option

CMPS 144	Networking II	3
CMPS 243	Networking III: Network Administration	3
CMPS 244	TCP/IP Networking	3

#### Electronics/Robotics Option

CMPS 106	Introduction to Analog and Digital Electronics	3
CMPS 206	Introduction to Micro-controllers	3
CMPS 207	Robot Development	3

#### Web Design Option

CMPS 172	Web Development II	3
CMPS 212	Graphic Design: Digital Media & Web Technology	3
CMPS 216	Web Development: Digital Media & Web Technology	3

**TOTAL ELECTIVES** **9**

**TOTAL DEGREE REQUIREMENTS** **90**

# PROGRAMS OF STUDY

## ASSOCIATE OF TECHNICAL ARTS IN INFORMATION TECHNOLOGY

This program of study is designed to prepare students for entry-level and intermediate-level employment in several information technology fields. Students can focus their attention beyond the core IT classes to an emphasis in computer repair and support, network support and administration, micro-controller/robotics or web page development. Classes are oriented toward training technicians for tribal, government, business and corporate environments. Students completing this degree program can also expect to work toward and complete some of the industry certifications demanded by employers in this competitive job market. Recipients of this degree can transfer directly into Evergreen State College's BA program in Computer Information Systems.

### NORTHWEST INDIAN COLLEGE REQUIREMENTS

BIOL 104	Biology and Natural History of Place (meets NSL requirement)	5
CMPS 101	Introduction to Computers, or above	3
ENGL 236	Survey of Native American Literature	5
HIST 111	Pre-contact Native American History (meets SS requirement)	2
HIST 112	Post-contact Native American History (meets SS requirement)	3
HMDV 110	Introduction to Successful Learning	4
NASD 105A-C	Northwest Indian College Seminar (1 credit per quarter for 3 quarters)	3
NASD 110	Introduction to Native American Studies (meets SS requirement)	3
<b>TOTAL NORTHWEST INDIAN COLLEGE REQUIREMENTS</b>		<b>28</b>

### GENERAL EDUCATION REQUIREMENTS

ENGL 101	English Composition I	5
CMST 101 OR	Introduction to Oral Communication OR	
CMST 210 OR	Interpersonal Communication OR	4
CMST 220	Public Speaking	
MATH 190	Vocational Mathematics or Math 102 or above	5
<b>TOTAL GENERAL EDUCATION REQUIREMENTS</b>		<b>14</b>

### CORE INFORMATION TECHNOLOGY REQUIREMENTS

CMPS 104	Operating Systems I: Installation and Troubleshooting	3
CMPS 105	Software I: Applications for Computer Professionals	3
CMPS 116	Microsoft Office I	3
CMPS 117	Microsoft Office II	3
CMPS 140	Networking I	3
CMPS 160	Assembly, Maintenance and Diagnostics	4
CMPS 170	Web Page Development	3
CMPS 205	Software II: Advanced Applications for Computer Professionals	3
CMPS 225	Introduction to Programming	4
CMPS 197	Internship/Practicum	6
CMPS 260 OR	Capstone Project OR	4
CMPS 297	Advanced Internship/Practicum	
<b>TOTAL CORE INFORMATION TECHNOLOGY REQUIREMENTS</b>		<b>39</b>

# PROGRAMS OF STUDY

## ASSOCIATE OF TECHNICAL ARTS IN INFORMATION TECHNOLOGY

CHOOSE ONE OF THE EMPHASIS AREAS (9 CREDITS) LISTED BELOW TO COMPLETE THE 90 CREDIT ATA REQUIREMENTS.

COMPUTER REPAIR AND SUPPORT	NETWORK SUPPORT AND ADMINISTRATION	MICRO-CONTROLLER/ROBOTICS	WEB PAGE DEVELOPMENT
CMPS 204 Operating Systems II 3 Credits	CMPS 144 Networking II 3 Credits	CMPS 106 Introduction to Analog and Digital Electronics 3 credits	CMPS 172 Web Page Development II 3 Credits
CMPS 270 Assembly, Maintenance and Diagnostics II 3 Credits	CMPS 243 Networking II: Networking Administration 3 Credits	CMPS 206 Introduction to Micro-controllers 3 Credits	CMPS 212 Graphic Design: Digital Media and Web Technology 3 Credits
CMPS 271 A+ Exam Preparation 3 Credits	CMPS 244 Networking Infrastructure 3 Credits	CMPS 207 Robot Development 3 Credits	CMPS 216 Web Development: Digital Media and Web Technology 3 Credits

TOTAL EMPHASIS REQUIREMENTS 9

TOTAL DEGREE REQUIREMENTS 90

### PROGRAM OUTCOMES

**OPERATING SYSTEMS** STUDENTS WILL BE ABLE TO:

- Install various operating systems.
- Diagnose operating system errors.
- Identify and repair malicious software problems.

**SOFTWARE APPLICATIONS** STUDENTS WILL BE ABLE TO:

- Demonstrate basic operations with an office suite composed of a word processor, a spreadsheet, a database, and presentation software.
- Demonstrate proficiency with software utilized by computer professionals.
- Install and use software and hardware appropriate to a given situation.

**PROGRAMMING SKILLS** STUDENTS WILL BE ABLE TO:

- Design and implement a computer program.
- Use variables, objects, and event-driven concepts in a computer program.
- Use program structures in a computer program.

**COMPUTER REPAIR AND SUPPORT** STUDENTS WILL BE ABLE TO:

- Disassemble and assemble a computer.
- Diagnose and repair common hardware problems.
- Pass the COMP TIA A+ practice exam.

CONTINUED ON FOLLOWING PAGE

## PROGRAMS OF STUDY

### ASSOCIATE OF TECHNICAL ARTS IN INFORMATION TECHNOLOGY

#### PROGRAM OUTCOMES CONTINUED

##### NETWORK SUPPORT AND ADMINISTRATION STUDENTS WILL BE ABLE TO:

- Install a server and workstation computers on a star network.
- Setup network security.
- Use and manage Active Directory.

##### MICRO CONTROLLERS AND ROBOTICS STUDENTS WILL BE ABLE TO:

- Program a micro controller to accomplish a specified task.
- Integrate sensors into a micro controller/robotic operation.
- Demonstrate robot construction techniques.

##### “HUMAN THINGS” STUDENTS WILL BE ABLE TO:

- Demonstrate various aspects of customer relations.
- Demonstrate creativity.



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