

Teri Gardner 8-21-2020

Department of Labor & Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530



REQUEST FOR REVISION OF STANDARDS



TO: Washington State Apprenticeship & Training Council

From: ACTIV - ACCELERATED CAREER TRAINING AND INNOVATION - 2170
(NAME OF PROGRAM STANDARDS)

Please update our Standards of Apprenticeship to reflect the following changes.
Additions shall be underlined.
Deletions shall be ~~struck through~~.
See attached.

Authorized signatures (chr.) <i>[Signature]</i>	Approved by: Washington State Apprenticeship & Training Council
(sec.) <i>Luke Hansen</i>	Secretary of WSATC:
date: 8/18/2020	date:

attach additional sheets if necessary

ACTIV - ACCELERATED CAREER TRAINING AND INNOVATION - 2170

<u>Occupational Objective(s):</u>	<u>SOC#</u>	<u>Term [WAC 296-05-015]</u>
<u>INFORMATION SECURITY ANALYST</u>	<u>15-1122.00</u>	<u>2000</u>
<u>LINUX/OPEN SOURCE IT SYSTEM ADMINISTRATOR</u>	<u>15-1142.00</u>	<u>2000</u>

I. GEOGRAPHIC AREA COVERED:

The area covered by these Standards shall be the Washington State counties of: King, Thurston, Mason, Lewis and Pierce.

IV. APPRENTICE WAGES and WAGE PROGRESSION:

C. ~~Insert Occupational Name~~ All Occupations

VIII. WORK PROCESSES:

ACTIV - ACCELERATED CAREER TRAINING AND INNOVATION - 2170

B. Information Security Analyst

Approximate Hours/Competency Level

1. Apply and Practice IT and Cybersecurity Fundamentals..... **130**
 - a. Learn and apply IT disciplines and principles to cybersecurity operations.
 - b. IT Infrastructure/service basics, including networks, servers, cloud, desktops, applications
 - c. Cybersecurity fundamentals – terminology, tools, body of knowledge, types of jobs

2. Oversee and Govern IT and Cybersecurity..... **300**
 - a. Contribute and provide leadership, management, direction, or development and advocacy so the organization may effectively conduct cybersecurity work.
 - b. The threat landscape – history of cybercrime, case studies
 - c. The written and unwritten rules, regulations, standards, ethics of cybersecurity – Trust

3. Secure IT Systems..... **300**
 - a. Securely provision IT resources by conceptualizing, designing, procuring, and/or building secure IT systems, with responsibility for aspects of system and/or network development.
 - b. Cybersecurity analysis and design
 - c. System threats and countermeasures

4. Operate and Maintain IT **300**
 - a. Provide the support, administration, and maintenance necessary to ensure effective and efficient IT system performance and security. The following IT and cybersecurity management principles will be adhered to:
 - b. NIST framework
 - c. Project Management principles
 - d. ITIL principles
 - e. Business Applications

5. Protect & Defend..... **300**
 - a. Contribute and collaborate to identify, analyze, and mitigate cybersecurity threats to internal IT systems and/or networks.
 - b. Incident response
 - c. Incident Management
 - d. Digital Forensics
 - e. Recovery management

6. Analyze with Cybersecurity Tools..... **540**
 - a. Contribute and perform highly-specialized review and evaluation of incoming cybersecurity information to determine its usefulness for intelligence.
 - b. Collect and operate IT systems to provide specialized denial and deception operations and collection of cybersecurity information that may be used to develop intelligence.
 - c. Investigate cybersecurity events or crimes related to IT systems, networks, and digital evidence.
 - d. Network and Security Monitoring
 - e. Encryption
 - f. Vulnerability Scanning

ACTIV - ACCELERATED CAREER TRAINING AND INNOVATION - 2170

- g. Penetration Testing
- h. Packet Sniffing and Password Auditing
- i. Wireless defense
- j. Network Intrusion Detection
- k. Managed Detection Services

7. Business and Technical Communications..... **130**
- a. Learn and practice effective communications within internal and external stakeholders.
 - b. Communications within IT teams and overall organization
 - c. Technical writing best practices
 - d. Dealing with business and technical stakeholders
 - e. Dealing with Law Enforcement and external agencies

Total Hours/# of Competency Levels: **(2000)**

C. Linux/Open Source IT System Administrator **Approximate Hours/Competency Level**

1. System administration..... **500**
- a. Learn and apply IT disciplines and principles to system administration.
 - b. Deploy and manage Linux distributions/ Windows Server
 - c. Update and monitor system components
 - d. Storage solution management
 - e. Manage file and print services
 - f. Security encryption and audit configuration
 - g. Monitor and configure network services
 - h. Create availability and disaster recovery plan(s)
 - i. Troubleshoot server issues and package compatibility

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2. **IT Infrastructure Management 500**
 - a. **Contribute and provide support to the management of IT infrastructure and systems**
 - b. **Implement and manage network solutions**
 - c. **Installing/uninstalling using package managers**
 - d. **Building software components from source repositories**
 - e. **Clustering and virtualization options for Linux systems**
 - f. **Configuring virtual machines (VMware, Xen, Hyper-V) and Containers**
 - g. **Balance network load**

3. **End Users and Group Management..... 300**
 - a. **Provide IT support to the management of end users and groups in the organization.**
 - b. **Configure domain controller(s)**
 - c. **Implement and manage group policy**
 - d. **Maintain active directory domain services**
 - e. **Supervise and monitor active directory certificate and rights management**

4. **Mail, Messaging, Directory, and Services Collaboration 300**
 - a. **Provide IT support to the management of key communication and collaboration application with the organization**
 - b. **Plan and configure user mailbox, groupware, and messaging services (e.g., Ex-change)**
 - c. **Plan, configure and support user collaboration platforms (Microsoft Teams, Slack)**

5. **Helpdesk Ticket Management 400**
 - a. **Provide IT support to end users for key business application and services.**
 - b. **Work within existing task assignment and record-keeping systems.**
 - c. **Open, respond, manage, and close tickets.**
 - d. **Document resolution information.**
 - e. **Update documentation on configuration and status of servers.**
 - f. **Research past resolutions and clean up notes/records on architecture and data flow diagrams or related documents.**

Total Hours/# of Competency Levels:

(2000)

IX. RELATED/SUPPLEMENTAL INSTRUCTION:

A. The methods of related/supplemental training must be indicated below (check those that apply):

State Community/Technical college

B. **(417 See Below)** Minimum RSI hours per year defined per the following [see WAC 296-05-015(6)]:

Twelve-month period from date of registration.*

Defined twelve-month school year: **(September)** through **(June)**.

Two-thousand hours of on the job training.

C. Additional Information:

esh 8/18/20

RECEIVED
By Evan Hamilton at 8:00 am, Sep 10, 2020

(Insert text)

1. Software Developer, Applications RSI Total: 417
2. Information Security Analysts RSI Total: 540
3. Linux/Open Source IT System Administrator: 620

Teri Gardner 9-10-2020

Teri Gardner 8-21-2020

XI. SPONSOR – RESPONSIBILITIES AND GOVERNING STRUCTURE

E.

c. The employer representatives shall be:

Mark Meyer, Chair
PeopleTech
 1217 235th place NE
 Sammamish, WA 98074

Steve Wood
~~975 Carpenter Rd NE ste 101~~
~~Lacey, WA 98516~~
AirNote LLC
2622 239th Ave SE
Sammamish, Wa 98075

Curt Miller, alternate
~~975 Carpenter Rd NE ste 101~~
~~Lacey, WA 98516~~
AirNote LLC
2622 239th Ave SE
Sammamish, Wa 98075

d. The employee representatives shall be:

~~Tiffany Anderson, Secretary~~
~~7207 6th Ave SE~~
~~Lacey, WA 98503~~
Padmini Vijayanand, Secretary
975 Carpenter RD NE
STE 101
Lacey WA 98516

Chris Fuess
~~1617 Bethel St SE~~
~~Olympia, Wa 98506~~
Andrew Gilbert
975 Carpenter Rd NE ste 101
Lacey, Wa 98516

~~Charles Cherry, alternate~~
~~975 Carpenter Rd NE ste 101~~
~~Lacey, WA 98516~~
Nimita Dedhia, alternate
PeopleTech
18300 NE Union Hill Road ste 210
Redmond, Wa 98502

Teri Gardner 8-21-2020

RECEIVED
By Evan Hamilton at 9:55 am, Aug 18, 2020

Department of Labor & Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530



Journey Level Wage Rate

From which apprentices' wages rates are computed

TO: Washington State Apprenticeship & Training Council

From ACTIV - ACCELERATED CAREER TRAINING AND INNOVATION # 2170
(NAME OF STANDARDS)

Occupations	County(s)	Journey Level Wage Rate	Effective Date:
INFORMATION SECURITY ANALYST	Thurston, Mason, King, Lewis and Pierce.	34.88	9/1/20
LINUX/OPEN SOURCE IT SYSTEM ADMINISTRATOR	Thurston, Mason, King, Lewis and Pierce.	33.16	9/1/20

Apprenticeship Related/Supplemental Instruction (RSI) Plan Review

Program Sponsor ACTIV (Accelerated Career Training and Innovation)		<i>Teri Gardner 8-21-2020</i>
Skilled Occupational Objective IT System Administrator (Linux & Open Source Specialization)		
Term/OJT Hours 2,000	Total RSI Hours 620	
Training Provider Bellevue College Continuing Education (Tombolo Institute)		

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprenticeship and assures that:

1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliance with WISHA and applicable federal and state regulations.

Mark Meyer

Printed Name of Program Sponsor



Signature of Program Sponsor

By the signature placed below, the **training provider** assures that:

1. The RSI will be conducted by instructors who meet the qualifications of "competent instructor" as described in WAC 296-05-003.
 - a. Has demonstrated a satisfactory employment performance in his/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
 - b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
 - c. Has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide the related technical instruction.
2. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, such instruction is clearly defined.

Albert Lewis Jr.

Print Name Training Provider



Signature of Training Provider

VP, Economic & Workforce Development

Title of Training Provider

Bellevue College

Organization of Training Provider

If there are additional training providers, please provide information and signatures on the next page.

Additional Resources: [Apprenticeship Related Supplemental Instruction \(RSI\) Plan Review Glossary of Term \(F100-519-000\)](#) and [Apprenticeship Related Supplemental Instruction \(RSI\) Plan Review Criteria \(F100-521-000\)](#).

SBCTC Program Administrator has reviewed RSI plan and recommendations of the Trade Committee.

Click or tap here to enter text.

Print Name of SBCTC Program Administrator

Signature of SBCTC Program Administrator

Date

SBCTC recommends approval

SBCTC recommends return to sponsor

Additional Training Providers (if necessary)

Click or tap here to enter text.

Print Name Training Provider

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Organization of Training Provider

Program Sponsor: ACTiV (Accelerated Career Training and Innovation)	Skilled Occupational Objective: IT System Administrator (Linux and Open Source Specialization)
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Note: The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of element/course" field.

Describe minimum hours of study per year in terms of (check one):

- 12-month period from date of registration.
- Defined 12-month school year.
- 2,000 hours of on-the-job training.

RSI Curriculum:

Element/Course:	CompTIA A+	Planned Hours: 60	Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			
Description of element/course: This course will provide an introduction to foundational IT skills across a variety of devices and operating systems. This course is a primer for the coursework to follow, including: <ul style="list-style-type: none"> • Hardware • Operating Systems • Software Troubleshooting • Networking • Hardware & network troubleshooting • Security • Mobile devices • Virtualization & Cloud computing • Operational procedures 			

Element/Course:	CompTIA Network+	Planned Hours: 60	Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			
Description of element/course: This course will provide the essential skills needed to confidently design, configure, manage and troubleshoot any wired and wireless devices. This course will enable students to learn the following skills: <ul style="list-style-type: none"> • Networking concepts • Infrastructure • Network operations • Network security • Network troubleshooting & tools 			

Element/Course:	CompTIA Linux+	Planned Hours: 60	Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			

Description of element/course:

This course will provide the provide the competency for an early system administrator career in supporting Linux systems. This course will enable students to learn the following skills:

- Hardware & system configuration
- System operation & maintenance
- Security
- Linux troubleshooting and diagnostics
- Automation and scripting

Element/Course:	CompTIA Server+	Planned Hours: 60	Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			
Description of element/course: This course will provide the technical knowledge and skills to perform a variety of tasks on server platforms in data centers or cloud computing. This course will enable students to learn the following: <ul style="list-style-type: none">• Server architecture• Server administration• Storage• Security• Networking• Disaster Recovery• Troubleshooting			

Element/Course:	CompTIA Cloud+	Planned Hours: 60	Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			
Description of element/course: This course will provide the knowledge and skills to securely implement, maintain and utilize cloud computing technologies. This course will enable students to learn the following skills: <ul style="list-style-type: none">• Configurations and deployment• Cloud management• Maintenance• Security• Troubleshooting			

Element/Course:	CompTIA Security+	Planned Hours: 60	Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			
Description of element/course: This course will provide the knowledge and skills to perform core security function and apply best practices in IT network and operational security. This course will enable students to learn the following skills: <ul style="list-style-type: none">• Threats, attacks & vulnerabilities• Technologies and tools• Architecture & design			

- Identity & access management
- Risk management
- Cryptography & PKI

Element/Course:	Fundamentals of Linux, LFS300	Planned Hours: 32	Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			
Description of element/course: This course will give you a good working knowledge of Linux, from both a graphical and command line perspective, allowing you to easily navigate through any of the major Linux distributions. You'll learn things like: <ul style="list-style-type: none"> • The history of Linux • How to install Linux • How to use the Graphical User Interface • How to control Linux using the command line • Basic Linux security • And much more! 			

Element/Course:	Linux Networking & Administration, LFS211	Planned Hours: 50	Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			
Description of element/course: Get the skills you need to get certified and work as a Linux systems engineer. This course is designed to give a good foundation towards passing the Linux Foundation Certified Engineer exam and advance your IT career in Linux. You'll learn: <ul style="list-style-type: none"> • How to design, deploy and maintain a network running under Linux. • How to administer the network services. • The skills to create and operate a network in any major Linux distribution. • How to securely configure the network interfaces. • How to deploy and configure file, web, email and name servers. 			

Element/Course:	Linux for System Admin, LFS301	Planned Hours:	32
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			
Description of element/course: This beginner-level course gives you the skills and information you need to pass the LFCS exam and work as a professional Linux system administrator.			

In this course you'll learn:

- How to administer, configure and upgrade Linux systems running one of the three major Linux distribution families: Red Hat, SUSE, Debian/Ubuntu.
- How to master the tools and concepts you'll need to efficiently build and manage an enterprise Linux infrastructure.
- How to use state-of-the-art system administration techniques in real-life scenarios via practical labs.
- And more.

Element/Course:	Linux Performance Tuning, LFS426	Planned Hours:	32
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			
Description of element/course: This intermediate-level course is designed to give you all the tools and techniques you need to keep your Linux systems running at optimal levels. These techniques and tools have been developed and tested in the most demanding high-performance computing environments. In this course, you'll learn: <ul style="list-style-type: none"> • Industry configuration best practices • The best tried-and-true optimization performance tuning tools and techniques • How to manually optimize the kernel's behavior • Tracing, profiling and instrumentation techniques across a wide range of conditions • And more. 			

Element/Course:	Linux Security Fundamentals, LFS216	Planned Hours:	50
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education			
Description of element/course: This course is a comprehensive look at the security challenges that can affect almost every system, especially with the seamless connectivity we seek from the Internet. Many of the features for securing Linux are built in to either the Linux Kernel or added by the various Linux Distributions. This class explores many of these options to secure the systems. In some cases specialized Linux appliances are used to demonstrate how one would interact with corporate production servers. This is an encompassing class experience that will further expand your awareness of security issues and preventative measures. The class starts with an overviews of Computer Security and touches on how security affects everyone in the chain of development, implementation, administration and the end user.			

Element/Course:	Linux Security, LFS416	Planned Hours:	32
Mode of Instruction (check all that apply)			

Classroom Lab Online Self-Study
Provided by: Bellevue College Continuing Education

Description of element/course:

This intermediate level course is completely hands-on and adopts a highly technical approach to cover important security techniques and tools. By providing visibility both into attack vectors and possible security holes, this course provides you a complete guide on how to mitigate security risks in any Linux environment.

You'll learn:

- How to assess security risks in your enterprise Linux environment.
- The best techniques and tools to increase security.
- Server hardening
- How to deploy and use monitoring and attack detection tools.
- How to gain visibility into possible vulnerabilities.
- The art and science of developing your Linux security policy and response strategy.
- How to configure your systems for compliance with HIPAA, DISA STIG, etc.

Element/Course:	High Availability Linux Architecture, LFS422	Planned Hours:	32
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Mode of Instruction (check all that apply)

Classroom Lab Online Self-Study
Provided by: Bellevue College Continuing Education

Description of element/course:

this course will teach you how to ensure that your servers stand up under even the most intense pressure.

Developed for some of the largest Linux deployments in the world, this course will teach you:

- How to create and maintain systems that allow for highly-available applications.
- The concepts and best practices used to meet security and high availability requirements using the latest hardware technologies.
- You'll also become familiar with tools that help you maintain and operate highly-available systems easily.

Teri Gardner 8-21-2020

Apprenticeship Related/Supplemental Instruction (RSI) Plan Review

Program Sponsor ACTiV (Accelerated Career Training and Innovation)	
Skilled Occupational Objective Information Cybersecurity Analyst/Specialist	
Term/OJT Hours 2,000	Total RSI Hours 540
Training Provider Bellevue College Continuing Education (Tombolo Institute)	

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Mark Meyer

Printed Name of Program Sponsor



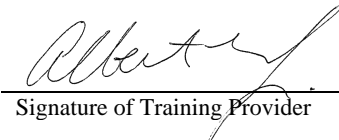
Signature of Program Sponsor

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Albert Lewis Jr.

Print Name Training Provider



Signature of Training Provider

VP, Economic & Workforce Development

Title of Training Provider

Bellevue College

Organization of Training Provider

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SBCTC Program Administrator has reviewed RSI plan and recommendations of the Trade Committee.

Click or tap here to enter text.

Print Name of SBCTC Program Administrator

Signature of SBCTC Program Administrator

Date

SBCTC recommends approval

SBCTC recommends return to sponsor

Additional Training Providers (if necessary)

[Click or tap here to enter text.](#)

Print Name Training Provider

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Organization of Training Provider

Program Sponsor: ACTiV (Accelerated Career Training and Innovation)	Skilled Occupational Objective: Information Cybersecurity Analyst/Specialist
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Note: The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the “Description of element/course” field.

Describe minimum hours of study per year in terms of (check one):

- 12-month period from date of registration.
 Defined 12-month school year.
 2,000 hours of on-the-job training.

Element/Course: CompTIA A+	Planned Hours: 60 Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education	
Description of element/course: This course will provide an introduction to foundational IT skills across a variety of devices and operating systems. This course is a primer for the coursework to follow, including: <ul style="list-style-type: none"> • Hardware • Operating Systems • Software Troubleshooting • Networking • Hardware & network troubleshooting • Security • Mobile devices • Virtualization & Cloud computing • Operational procedures 	

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Element/Course: CompTIA Linux+	Planned Hours: 60 Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education	
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- Linux troubleshooting and diagnostics
- Automation and scripting

Element/Course: CompTIA Server+	Planned Hours: 60 Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education	
Description of element/course: This course will provide the technical knowledge and skills to perform a variety of tasks on server platforms in data centers or cloud computing. This course will enable students to learn the following: <ul style="list-style-type: none"> • Server architecture • Server administration • Storage • Security • Networking • Disaster Recovery • Troubleshooting 	

Element/Course: CompTIA Cloud+	Planned Hours: 60 Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education	
Description of element/course: This course will provide the knowledge and skills to securely implement, maintain and utilize cloud computing technologies. This course will enable students to learn the following skills: <ul style="list-style-type: none"> • Configurations and deployment • Cloud management • Maintenance • Security • Troubleshooting 	

Element/Course: CompTIA Security+	Planned Hours: 60 Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education	
Description of element/course: This course will provide the knowledge and skills to perform core security function and apply best practices in IT network and operational security. This course will enable students to learn the following skills: <ul style="list-style-type: none"> • Threats, attacks & vulnerabilities • Technologies and tools • Architecture & design • Identity & access management • Risk management • Cryptography & PKI 	

Element/Course: CompTIA CyberSecurity Analyst+ (CySA+)	Planned Hours: 60 Hours
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Bellevue College Continuing Education	

Description of element/course:

This course will provide the knowledge and skills to apply behavioral analytics to IT security in order to improve the state of IT security. This course will enable students to learn the following skills:

- Threat management
- Vulnerability management
- Security architecture and toolsets
- Cyber-incident response

Element/Course: **CompTIA Penetration Testing+ (PenTest+)**

Planned Hours: 60 Hours

Mode of Instruction (check all that apply)

Classroom Lab Online Self-Study

Provided by: Bellevue College Continuing Education

Description of element/course:

This course will provide the knowledge and skills in penetration testing to manage vulnerabilities on the IT network. This course will enable students to learn the following skills in penetration testing and vulnerability management:

- Planning and scoping
- Information gathering and vulnerability identification
- Attacks and exploits
- Penetration testing tools
- Reporting and communications

Element/Course: **Basic Programming Essentials**

Planned Hours: 30

Mode of Instruction (check all that apply)

Classroom Lab Online Self-Study

Provided by: Bellevue College Continuing Education

Description of element/course:

This course will provide the knowledge and skills in basic software and application programming. This course will enable students to learn the following skills in programming:

- Computer programming concepts and terminology
- Write simple computer programs using the basic coding structures in C#
- Test and debug simple programs in Visual Studio (VS).

Element/Course: **HTML and CSS Level 1**

Planned Hours: 30

Mode of Instruction (check all that apply)

Classroom Lab Online Self-Study

Provided by: Bellevue College Continuing Education

Description of element/course:

This course will provide the knowledge and skills in web programming using HTML and CSS. This course will enable students to learn to create the content of a webpage with text, images and hyperlinks using web technologies like HTML and CSS.

This course will enable student to use the latest version of HTML and CSS to create the content of a webpage complete with text, images and hyperlinks. Then enhance the look and feel of websites using cascading style sheets to modify page text and layout through hands-on practice in the classroom. Students will be introduced to the current coding standards and how to make pages work in today's environment. By the end of class students will be able to create and style a basic webpage.