

# Auburn School District #408 Framework: Computer Systems Engineering 1

**Course:** Computer Installation and Repair Technology/Technician

**Total Framework Hours:** 90 Hours

**CIP Code:** 470104

**Type:** Preparatory

**Career Cluster:** Information Technology

**Date Last Modified:** Friday, April 15, 2016

## Resources and Standard used in Framework Development:

Standards used for this framework are from the OSPI Model Framework for 470104 Computer Installation and Repair Technology/Technician

## Unit 1 COMPUTING OVERVIEW

**Hours: 10**

### Performance Assessment(s):

Testout LabSim PC Pro Unit 1 Exams  
Testout LabSim PC Pro Unit 1 Lab Simulations  
Testout LabSim PC Pro Unit 1 Final Assessment  
Technology Careers Presentation

### Leadership Alignment:

SkillsUSA Computer Maintenance and Technology:  
CMT 1.0 - Perform maintenance on personal computers and computer components  
CMT 8.0 - Display communication and professionalism while working in computer maintenance technology  
SkillsUSA Committee Identified Academic Skills:  
Language Arts Skills:  
- Organize and synthesize information for use in written and oral presentations  
- Demonstrate knowledge of appropriate reference materials  
1.A.3 Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize creative efforts  
8.A.3 Utilize time and manage workload efficiently

### Standards and Competencies

Standard: Computer Hardware  
Standard: Operational Procedure  
Standard WR 1: Career Planning  
Standard WR 3: Employability and Entrepreneurship

**Aligned to Washington State Standards**

**Arts**

**Communication - Speaking and Listening**

**Health and Fitness**

**Language**

**Mathematics**

**Reading**

CC: Reading Informational Text

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**Science**

**Social Studies**

**Writing**

CC: Writing for Literacy in History/Social Studies, Science, and Technical Subjects (9-10)

CC: Writing for Literacy in History/Social Studies, Science, and Technical Subjects (11-12)

## 21st Century Skills

### LEARNING AND INNOVATION

#### Creativity and Innovation

- Think Creatively
- Work Creatively with Others
- Implement Innovations

#### Creative Thinking and Problem Solving

- Reason Effectively
- Use Systems Thinking
- Make Judgements and Decisions
- Solve Problems

#### Communication and Collaboration

- Communicate Clearly
- Collaborate with Others

### INFORMATION, MEDIA AND TECHNOLOGY SKILLS

#### Information Literacy

- Access and Evaluate Information
- Use and Manage Information

#### Media Literacy

- Analyze Media
- Create Media Products

#### Information, Communications, and Technology (ICT Literacy)

- Apply Technology Effectively

### LIFE AND CAREER SKILLS

#### Flexibility and Adaptability

- Adapt to Change
- Be Flexible

#### Initiative and Self-Direction

- Manage Goals and Time
- Work Independently
- Be Self-Directed Learners

#### Social and Cross-Cultural

- Interact Effectively with Others
- Work Effectively in Diverse Teams

#### Productivity and Accountability

- Manage Projects
- Produce Results

#### Leadership and Responsibility

- Guide and Lead Others
- Be Responsible to Others

**Performance Assessment(s):**

Testout LabSim PC Pro Unit 2 Exams  
 Testout LabSim PC Pro Unit 2 Lab Simulations  
 Testout LabSim PC Pro Unit 2 Final Assessment  
 Shop Safety Assessment

**Leadership Alignment:**

SkillsUSA Computer Maintenance and Technology:  
 CMT 1.0 - Perform maintenance on personal computers and computer components  
 CMT 7.0 - Apply awareness of safety and environmental concerns surrounding computer maintenance technology  
 CMT 8.0 - Display communication and professionalism while working in computer maintenance technology  
 SkillsUSA Committee Identified Academic Skills:  
 Language Arts Skills:  
 - Organize and synthesize information for use in written and oral presentations  
 - Demonstrate knowledge of appropriate reference materials  
 Science Skills:  
 - Use knowledge of static electricity, current electricity and circuits  
 2.D.2 Identify and ask significant questions that clarify various points of view and lead to better solutions  
 Be Responsible to Others  
 11.B.1 Act responsibly with the interests of the larger community in mind

**Standards and Competencies**

Standard: General and Computer Safety  
 Standard: General and Computer Safety  
 - Understand and apply concepts related to computers and electronics  
 - Identify general safety hazards and correctly report them  
 - Identify and resolve electrical equipment safety hazards.  
 - Understand and implement general classroom safety regarding: Horse Play, Throwing Items, Safety Glasses, Lifting  
 Standard WR 4: Problem Solving  
 Standard WR 5: Health and Safety  
 Standard WR 7: Ethics and Legal responsibilities

**Aligned to Washington State Standards****Arts****Communication - Speaking and Listening****Health and Fitness****Language****Mathematics****Reading**

CC: Reading for Literacy in Science and Technical Subjects

## Science

Physical Science

## Social Studies

## Writing

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#### Productivity and Accountability

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- Produce Results

#### Leadership and Responsibility

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**Performance Assessment(s):**

Testout LabSim PC Pro Unit 3 Exams  
 Testout LabSim PC Pro Unit 3 Lab Simulations  
 Testout LabSim PC Pro Unit 3 Final Assessment  
 In Class Hardware Lab Activities

**Leadership Alignment:**

SkillsUSA Computer Maintenance and Technology:  
 CMT 1.0 - Perform maintenance on personal computers and computer components  
 CMT 7.0 - Apply awareness of safety and environmental concerns surrounding computer maintenance technology  
 CMT 8.0 - Display communication and professionalism while working in computer maintenance technology  
 SkillsUSA Committee Identified Academic Skills:  
 Language Arts Skills:  
 - Organize and synthesize information for use in written and oral presentations  
 - Demonstrate knowledge of appropriate reference materials  
 Science Skills:  
 - Use knowledge of static electricity, current electricity and circuits  
 Use Systems Thinking  
 2.B.1 Analyze how parts of a whole interact with each other to produce overall outcomes in complex  
 Manage Goals and Time  
 8.A.1 Set goals with tangible and intangible success criteria

**Standards and Competencies**

Standard: General and Computer Safety  
 Standard: Computer Hardware  
 Standard: Computer Troubleshooting, Repair and Maintenance  
 Standard: Information Systems  
 Standard WR 4: Problem Solving  
 Standard WR 5: Health and Safety  
 Standard WR 6: Teamwork and Cooperation

**Aligned to Washington State Standards****Arts****Communication - Speaking and Listening****Health and Fitness****Language****Mathematics****Reading**

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**21st Century Skills**

**LEARNING AND INNOVATION**

**Creativity and Innovation**

- Think Creatively
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**Creative Thinking and Problem Solving**

- Reason Effectively
- Use Systems Thinking
- Make Judgements and Decisions
- Solve Problems

**Communication and Collaboration**

- Communicate Clearly
- Collaborate with Others

**INFORMATION, MEDIA AND TECHNOLOGY SKILLS**

**Information Literacy**

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**Media Literacy**

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**LIFE AND CAREER SKILLS**

**Flexibility and Adaptability**

- Adapt to Change
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**Initiative and Self-Direction**

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**Social and Cross-Cultural**

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**Unit 4 PERIPHERAL DEVICES****Hours: 10****Performance Assessment(s):**

Testout LabSim PC Pro Unit 4 Exams  
Testout LabSim PC Pro Unit 4 Lab Simulations  
Testout LabSim PC Pro Unit 4 Final Assessment

**Leadership Alignment:**

SkillsUSA Computer Maintenance and Technology:  
CMT 1.0 - Perform maintenance on personal computers and computer components  
CMT 7.0 - Apply awareness of safety and environmental concerns surrounding computer maintenance technology  
CMT 8.0 - Display communication and professionalism while working in computer maintenance technology  
SkillsUSA Committee Identified Academic Skills:  
Language Arts Skills:  
- Organize and synthesize information for use in written and oral presentations  
- Demonstrate knowledge of appropriate reference materials  
2.C.3 Synthesize and make connections between information and arguments  
Manage Goals and Time  
8.A.1 Set goals with tangible and intangible success criteria

**Standards and Competencies**

Standard: General and Computer Safety  
Standard: Computer Hardware  
Standard WR 4: Problem Solving  
Standard WR 5: Health and Safety

**Aligned to Washington State Standards****Arts****Communication - Speaking and Listening****Health and Fitness****Language****Mathematics****Reading**

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**Performance Assessment(s):**

Testout LabSim PC Pro Unit 5 Exams  
 Testout LabSim PC Pro Unit 5 Lab Simulations  
 Testout LabSim PC Pro Unit 5 Final Assessment  
 In Class Hardware Lab Activities

**Leadership Alignment:**

SkillsUSA Computer Maintenance and Technology:  
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 CMT 7.0 - Apply awareness of safety and environmental concerns surrounding computer maintenance technology  
 CMT 8.0 - Display communication and professionalism while working in computer maintenance technology  
 SkillsUSA Committee Identified Academic Skills:  
 Language Arts Skills:  
 - Organize and synthesize information for use in written and oral presentations  
 - Demonstrate knowledge of appropriate reference materials  
 Science Skills:  
 - Use knowledge of static electricity, current electricity and circuits  
 Use and Manage Information  
 4.B.1 Use information accurately and creatively for the issue or problem at hand  
 Works Independently  
 8.B.1 Monitor, define, prioritize and complete tasks without direct oversight

**Standards and Competencies**

Standard: General and Computer Safety  
 Standard: Computer Hardware  
 Standard: Computer Troubleshooting, Repair and Maintenance  
 Standard WR 4: Problem Solving  
 Standard WR 5: Health and Safety  
 Standard WR 6: Teamwork and Cooperation  
 Standard WR 7: Ethics and Legal responsibilities

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