Auburn School District #408 Framework: Electronics Technology (1-2)

Course: Computer Installation and Repair Technology/Technician
Total Framework Hours: 180 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 SAFETY — Hours: 10

Performance Assessment(s):

Textbook assignment
Safety assignment
Safety Exam

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Reason Effectively
2.A.1 Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation
4.A.2 Evaluate information critically and competently

Standards and Competencies

Standard: General and Computer Safety

Standard WR 2: Personal Success

WR-2.7 Identify skills that can be transferable among a variety of careers.

Standard WR 5: Health and Safety

International Society of Certifited Electronics Technicians (ISCET) 7

7.4. Safety

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

Reading

CC: Reading Informational Text

Science

Social Studies

Writing

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

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

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation
- [x] Think Creatively
- [x] Work Creatively with Others
- [ ] Implement Innovations

Creative Thinking and Problem Solving
- [x] Reason Effectively
- [ ] Use Systems Thinking
- [x] Make Judgements and Decisions
- [x] Solve Problems

Communication and Collaboration
- [x] Communicate Clearly
- [x] Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- [x] Access and Evaluate Information
- [x] Use and Manage Information

Media Literacy
- [x] Analyze Media
- [ ] Create Media Products

Information, Communications, and Technology (ICT Literacy)
- [x] Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- [x] Adapt to Change
- [ ] Be Flexible

Initiative and Self-Direction
- [x] Mange Goals and Time
- [x] Work Independently
- [ ] Be Self-Directed Learners

Social and Cross-Cultural
- [x] Interact Effectively with Others
- [x] Work Effectively in Diverse Teams

Productivity and Accountability
- [ ] Manage Projects
- [ ] Produce Results

Leadership and Responsibility
- [x] Guide and Lead Others
- [x] Be Responsible to Others

Unit 2 FUNDAMENTALS OF SOLDERING — Hours: 10

Performance Assessment(s):

Textbook assignment
Soldering Assignment
Soldering Project
Soldering Assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
1.B.2 Be open and responsive to new and diverse perspectives; incorporate group input and feedback into the work
Use Systems Thinking
2.B.1 Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems

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

International Society of Certifited Electronics Technicians (ISCET) 1-3

2.8. Electrical Safety

International Society of Certifited Electronics Technicians (ISCET) 7

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

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
- [x] Think Creatively
- [ ] Work Creatively with Others
- [ ] Implement Innovations

Creative Thinking and Problem Solving
- [x] Reason Effectively
- [ ] Use Systems Thinking
- [x] Make Judgements and Decisions
- [x] Solve Problems

Communication and Collaboration
- [x] Communicate Clearly
- [x] Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- [x] Access and Evaluate Information
- [x] Use and Manage Information

Media Literacy
- [x] Analyze Media
- [ ] Create Media Products

Information, Communications, and Technology (ICT Literacy)
- [x] Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- [ ] Adapt to Change
- [ ] Be Flexible

Initiative and Self-Direction
- [x] Mange Goals and Time
- [x] Work Independently
- [x] Be Self-Directed Learners

Social and Cross-Cultural
- [ ] Interact Effectively with Others
- [ ] Work Effectively in Diverse Teams

Productivity and Accountability
- [x] Manage Projects
- [x] Produce Results

Leadership and Responsibility
- [x] Guide and Lead Others
- [x] Be Responsible to Others

Unit 3 FUNDAMENTALS OF ELECTRICITY — Hours: 10

Performance Assessment(s):

Textbook assignment
Fundamentals assignment
Circuit Challenge activity
Fundamentals assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Communicate Clearly
3.A.1 Articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts
Collaborate with Others
3.B.1 Demonstrate ability to work effectively and respectfully with diverse teams

Standards and Competencies

Standard WR 4: Problem Solving

Standard WR 6: Teamwork and Cooperation

International Society of Certifited Electronics Technicians (ISCET) 1-3

2.1. Atoms

2.2. Electrical Charge

2.3. Voltage

2.4. Current

2.5. Resistance

2.6. The Electric Circuit

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

Quantities (N-Q)

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- ☑ Mange 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

Unit 4 NUMBER NOTATION — Hours: 10

Performance Assessment(s):

Textbook assignment
ISCET assignment
Circuit Challenge actvitiy
Notation assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Manage Projects
10.A.1 Set and meet goals, even in the face of obstacles and competing pressures
Reason Effectively
2.A.1 Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation

Standards and Competencies

Standard WR 4: Problem Solving

International Society of Certifited Electronics Technicians (ISCET) 1-3

1.2. Scientific Notation

1.3. Engineering Notation and Metric Prefixes

1.4. Metric Unit Conversions

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

CC: Mathematical Practices (MP)

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- [x] Think Creatively
- [ ] Work Creatively with Others
- [ ] Implement Innovations

Creative Thinking and Problem Solving
- [x] Reason Effectively
- [ ] Use Systems Thinking
- [x] Make Judgements and Decisions
- [x] Solve Problems

Communication and Collaboration
- [x] Communicate Clearly
- [ ] Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- [x] Access and Evaluate Information
- [x] Use and Manage Information

Media Literacy
- [x] Analyze Media
- [ ] Create Media Products

Information, Communications, and Technology (ICT Literacy)
- [x] Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- [ ] Adapt to Change
- [ ] Be Flexible

Initiative and Self-Direction
- [x] Mange Goals and Time
- [x] Work Independently
- [x] Be Self-Directed Learners

Social and Cross-Cultural
- [x] Interact Effectively with Others
- [x] Work Effectively in Diverse Teams

Productivity and Accountability
- [ ] Manage Projects
- [x] Produce Results

Leadership and Responsibility
- [x] Guide and Lead Others
- [x] Be Responsible to Others

Unit 5 INTRODUCTION TO RESISTANCE — Hours: 10

Performance Assessment(s):

ISCET assignment
Textbook assignment
Resistance lab
Circuit Challenge activity
Resistance project
Resistance assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Reason Effectively
2.A.1 Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation
Access and Evaluate Information
4.A.1 Access information efficiently (time) and effectively (sources)

Standards and Competencies

Standard: General and Computer Safety
Standard WR 4: Problem Solving
Standard WR 5: Health and Safety
Standard WR 6: Teamwork and Cooperation
International Society of Certified Electronics Technicians (ISCET) 1-3
1.4. Metric Unit Conversions
2.5. Resistance
2.6. The Electric Circuit
2.7. Basic Circuit Measurements
2.8. Electrical Safety
3.5. The Power Rating of Resistors
International Society of Certified Electronics Technicians (ISCET) 4-6
4.1. Resistors in series
4.3. Total Series Resistance
5.1. Resistors in Parallel
5.3. Total Parallel Resistance
6.1. Identifying Series-Parallel Relationships
International Society of Certified Electronics Technicians (ISCET) 7
7.1. Solder
7.2. Soldering Equipment
7.3. Desoldering Equipment
7.4. Safety

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

CC: Mathematical Practices (MP)

CC: Algebra (A)

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- ☑ Mange 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

Unit 6 INTRODUCTION TO CURRENT — Hours: 10

Performance Assessment(s):

ISCET assignment
Textbook assignment
Current assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Apply Technology Effectively
6.A.1 Use technology as a tool to research, organize, evaluate and communicate information
Produce Results
10.B.1Demonstrate additional attributes associated with producing high quality products

Standards and Competencies

Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 4: Problem Solving
International Society of Certifited Electronics Technicians (ISCET) 1-3
1.4. Metric Unit Conversions
2.2. Electrical Charge
2.4. Current
2.6. The Electric Circuit
International Society of Certifited Electronics Technicians (ISCET) 4-6
4.2. Current in a Series Circuit

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

CC: Mathematical Practices (MP)

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- ☑ Mange 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

Unit 7 INTRODUCTION TO VOLTAGE — Hours: 10

Performance Assessment(s):

ISCET assignment
Textbook assignment
Circuit Challenge activity
Voltage assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
10.A.2 Prioritize, plan and manage work to achieve the intended result
11.A.3 Inspire others to reach their very best via example and selflessness

Standards and Competencies

Standard: General and Computer Safety
Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 4: Problem Solving
Standard WR 5: Health and Safety
International Society of Certifited Electronics Technicians (ISCET) 1-3
1.4. Metric Unit Conversions
2.3. Voltage
2.6. The Electric Circuit
2.7. Basic Circuit Measurements
2.8. Electrical Safety
International Society of Certifited Electronics Technicians (ISCET) 4-6
4.5. Voltage Sources in Series
4.7. Circuit Ground
5.2. Voltage in Parallel Circuits
6.1. Identifying Series-Parallel Relationships

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

CC: Algebra (A)

CC: Mathematical Practices (MP)

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- [x] Think Creatively
- [x] Work Creatively with Others
- [ ] Implement Innovations

Creative Thinking and Problem Solving
- [x] Reason Effectively
- [x] Use Systems Thinking
- [x] Make Judgements and Decisions
- [x] Solve Problems

Communication and Collaboration
- [x] Communicate Clearly
- [x] Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- [x] Access and Evaluate Information
- [x] Use and Manage Information

Media Literacy
- [x] Analyze Media
- [x] Create Media Products

Information, Communications, and Technology (ICT Literacy)
- [x] Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- [x] Adapt to Change
- [x] Be Flexible

Initiative and Self-Direction
- [x] Mange Goals and Time
- [x] Work Independently
- [x] Be Self-Directed Learners

Social and Cross-Cultural
- [x] Interact Effectively with Others
- [x] Work Effectively in Diverse Teams

Productivity and Accountability
- [x] Manage Projects
- [x] Produce Results

Leadership and Responsibility
- [x] Guide and Lead Others
- [x] Be Responsible to Others

Unit 8 INTRODUCTION TO OHM'S LAW — Hours: 10

Performance Assessment(s):

ISCET assignment
Textbook assignment
Circuit Challenge activity
Ohm's Law assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Be Self-Directed Learners
8.C.1 Go beyond basic mastery of skills and/or curriculum to explore and expand one's own learning and opportunities to gain expertise

Standards and Competencies

Standard: General and Computer Safety
Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 4: Problem Solving
Standard WR 5: Health and Safety
International Society of Certifited Electronics Technicians (ISCET) 1-3
1.1. Electrical Components and Measuring Instruments
1.3. Engineering Notation and Metric Prefixes
1.4. Metric Unit Conversions
2.3. Voltage
2.4. Current
2.5. Resistance
2.6. The Electric Circuit
2.7. Basic Circuit Measurements
2.8. Electrical Safety
3.1. Ohm's Law
3.2. Application of Ohm's Law
International Society of Certifited Electronics Technicians (ISCET) 4-6
4.1. Resistors in series
4.2. Current in a Series Circuit
4.4. Ohm's Law in Series Circuits
5.4. Ohm's Law in Parallel Circuits

Aligned to Washington State Standards
Arts
Communication - Speaking and Listening
Health and Fitness
Language
Mathematics
CC: Number and Quantity (N)
CC: Algebra (A)
CC: Mathematical Practices (MP)
Reading
CC: Reading Informational Text
CC: Reading for Literacy in Science and Technical Subjects
Science
Physical 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
- [x] Think Creatively
- [x] Work Creatively with Others
- [x] Implement Innovations

Creative Thinking and Problem Solving
- [x] Reason Effectively
- [x] Use Systems Thinking
- [x] Make Judgements and Decisions
- [x] Solve Problems

Communication and Collaboration
- [x] Communicate Clearly
- [x] Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- [x] Access and Evaluate Information
- [x] Use and Manage Information

Media Literacy
- [x] Analyze Media
- [ ] Create Media Products

Information, Communications, and Technology (ICT Literacy)
- [x] Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- [x] Adapt to Change
- [x] Be Flexible

Initiative and Self-Direction
- [x] Mange Goals and Time
- [x] Work Independently
- [x] Be Self-Directed Learners

Social and Cross-Cultural
- [x] Interact Effectively with Others
- [x] Work Effectively in Diverse Teams

Productivity and Accountability
- [x] Manage Projects
- [x] Produce Results

Leadership and Responsibility
- [x] Guide and Lead Others
- [x] Be Responsible to Others

Unit 9 INTRODUCTION TO BREAD-BOARDING Hours: 10

Performance Assessment(s):

Breadboarding activity
Breadboarding assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Works Independently
8.B.1Monitor, define, prioritize and complete tasks without direct oversight

Standards and Competencies

Standard: General and Computer Safety
Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 4: Problem Solving
Standard WR 5: Health and Safety
Standard WR 6: Teamwork and Cooperation
International Society of Certifited Electronics Technicians (ISCET) 1-3
1.1. Electrical Components and Measuring Instruments
1.4. Metric Unit Conversions
2.3. Voltage
2.4. Current
2.5. Resistance
2.6. The Electric Circuit
2.7. Basic Circuit Measurements
2.8. Electrical Safety
3.8. Introduction to Troubleshooting
International Society of Certifited Electronics Technicians (ISCET) 4-6
4.7. Circuit Ground
4.8. Troubleshooting
5.6. Troubleshooting
6.3. Troubleshooting

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

CC: Reading Informational Text

Science

Physical Science

Social Studies

Writing

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

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

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation
- [x] Think Creatively
- [x] Work Creatively with Others
- [x] Implement Innovations

Creative Thinking and Problem Solving
- [x] Reason Effectively
- [x] Use Systems Thinking
- [x] Make Judgements and Decisions
- [x] Solve Problems

Communication and Collaboration
- [x] Communicate Clearly
- [x] Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- [x] Access and Evaluate Information
- [x] Use and Manage Information

Media Literacy
- [x] Analyze Media
- [ ] Create Media Products

Information, Communications, and Technology (ICT Literacy)
- [x] Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- [x] Adapt to Change
- [x] Be Flexible

Initiative and Self-Direction
- [x] Mange Goals and Time
- [x] Work Independently
- [x] Be Self-Directed Learners

Social and Cross-Cultural
- [x] Interact Effectively with Others
- [x] Work Effectively in Diverse Teams

Productivity and Accountability
- [x] Manage Projects
- [x] Produce Results

Leadership and Responsibility
- [x] Guide and Lead Others
- [x] Be Responsible to Others

Unit 10 INTRODUCTION TO ELECTRICAL MEASUREMENTS — Hours: 10

Performance Assessment(s):

ISCET assignment
Textbook assignment
Circuit Challenge activity
Electrical measurement assessment
Electrical measurement lab activity

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Reason Effectively
2.A.1 Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation
Use and Manage Information
4.B.1 Use information accurately and creatively for the issue or problem at hand

Standards and Competencies

Standard: General and Computer Safety
Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 4: Problem Solving
Standard WR 5: Health and Safety
International Society of Certifited Electronics Technicians (ISCET) 4-6
4.1. Resistors in series
4.3. Total Series Resistance
4.4. Ohm's Law in Series Circuits
5.2. Voltage in Parallel Circuits
5.3. Total Parallel Resistance
5.4. Ohm's Law in Parallel Circuits

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

CC: Mathematical Practices (MP)

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- [x] Think Creatively
- [x] Work Creatively with Others
- [x] Implement Innovations

Creative Thinking and Problem Solving
- [x] Reason Effectively
- [x] Use Systems Thinking
- [x] Make Judgements and Decisions
- [x] Solve Problems

Communication and Collaboration
- [x] Communicate Clearly
- [x] Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- [x] Access and Evaluate Information
- [x] Use and Manage Information

Media Literacy
- [x] Analyze Media
- [ ] Create Media Products

Information, Communications, and Technology (ICT Literacy)
- [x] Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- [ ] Adapt to Change
- [ ] Be Flexible

Initiative and Self-Direction
- [x] Mange Goals and Time
- [x] Work Independently
- [x] Be Self-Directed Learners

Social and Cross-Cultural
- [ ] Interact Effectively with Others
- [ ] Work Effectively in Diverse Teams

Productivity and Accountability
- [x] Manage Projects
- [x] Produce Results

Leadership and Responsibility
- [ ] Guide and Lead Others
- [x] Be Responsible to Others

Unit 11 INTRODUCTION TO POWER — Hours: 10

Performance Assessment(s):

ISCET assignment
Textbook assignment
Circuit Challenge activity
Power assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Reason Effectively
2.A.1 Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation

Standards and Competencies

Standard: General and Computer Safety
Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 4: Problem Solving
Standard WR 5: Health and Safety
International Society of Certifited Electronics Technicians (ISCET) 1-3
3.3. Energy and Power
3.4. Power in an Electric Circuit
3.7. Power Supplies
International Society of Certifited Electronics Technicians (ISCET) 4-6
4.6. Power in a Series Circuit
5.5. Power in a Parallel Circuit
6.3. Troubleshooting

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

CC: Mathematical Practices (MP)

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- ☑ Mange 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

Unit 12 INTRODUCTION TO DC CIRCUITS — Hours: 10

Performance Assessment(s):

ISCET assignment
Textbook assignment
Circuit Challenge activity
Introduction to DC assessment
Introduction to DC lab activity

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Be Flexible
7.B.1 Incorporate feedback effectively
Manage Projects
10.A.1 Set and meet goals, even in the face of obstacles and competing pressures

Standards and Competencies

Standard: General and Computer Safety
Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 5: Health and Safety
International Society of Certifited Electronics Technicians (ISCET) 1-3
1.1. Electrical Components and Measuring Instruments
1.3. Engineering Notation and Metric Prefixes
2.3. Voltage
2.4. Current
2.5. Resistance
2.6. The Electric Circuit
2.7. Basic Circuit Measurements
3.1. Ohm's Law
3.2. Application of Ohm's Law
3.3. Energy and Power
3.4. Power in an Electric Circuit
3.6. Energy Conversion and Voltage Drop in a Resistance
3.8. Introduction to Troubleshooting
International Society of Certifited Electronics Technicians (ISCET) 4-6
4.1. Resistors in series
4.2. Current in a Series Circuit
4.3. Total Series Resistance
4.4. Ohm's Law in Series Circuits
4.5. Voltage Sources in Series
4.6. Power in a Series Circuit
4.7. Circuit Ground
4.8. Troubleshooting
5.1. Resistors in Parallel

5.2. Voltage in Parallel Circuits
5.3. Total Parallel Resistance
5.4. Ohm's Law in Parallel Circuits
5.5. Power in a Parallel Circuit
5.6. Troubleshooting
6.1. Identifying Series-Parallel Relationships
6.2. The Wheatstone Bridge
6.3. Troubleshooting

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

CC: Mathematical Practices (MP)

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- ☑ Mange 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

Unit 13 INTRODUCTION TO MAGNETISM — Hours: 10

Performance Assessment(s):

ISCET assignment
Textbook assignment
Circuit Challenge activity
Introduction to Magnetism assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Apply Technology Effectively
6.A.1 Use technology as a tool to research, organize, evaluate and communicate information
Works Independently
8.B.1 Monitor, define, prioritize and complete tasks without direct oversight

Standards and Competencies

Standard: General and Computer Safety
- Understand and apply concepts related to computers and electronics

Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 4: Problem Solving
Standard WR 5: Health and Safety
International Society of Certifited Electronics Technicians (ISCET) 1-3
International Society of Certifited Electronics Technicians (ISCET) 4-6

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- ☑ Mange 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

Unit 14 INDUCTANCE — Hours: 10

Performance Assessment(s):

ISCET assignment
Textbook assignment
Circuit Challenge activity
Inductance assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
10.B.1.b Manage time and projects effectively
8.C.3 Demonstrate commitment to learning as a lifelong process

Standards and Competencies

Standard: General and Computer Safety
Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 4: Problem Solving
Standard WR 5: Health and Safety
International Society of Certifited Electronics Technicians (ISCET) 1-3
International Society of Certifited Electronics Technicians (ISCET) 4-6

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Mathematical Practices (MP)

CC: Number and Quantity (N)

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- ☑ Mange 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

Unit 15 CAPACITANCE — Hours: 10

Performance Assessment(s):

ISCET assignment
Textbook assignment
Circuit Challenge activity
Capacitance assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
Use and Manage Information
4.B.1 Use information accurately and creatively for the issue or problem at hand

Standards and Competencies

Standard: General and Computer Safety
Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 4: Problem Solving
Standard WR 5: Health and Safety
International Society of Certifited Electronics Technicians (ISCET) 1-3
International Society of Certifited Electronics Technicians (ISCET) 4-6

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Number and Quantity (N)

CC: Mathematical Practices (MP)

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

Science

Physical 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
- ☑ Mange 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

Unit 16 LEADERSHIP — Hours: 5

Performance Assessment(s):

SkillsUSA Professional Development Program Activities
In Class Leadership Opportunities
Profesional Behaviour Assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
10.B.1.a Work positively and ethically
Be Responsible to Others
11.B.1 Act responsibly with the interests of the larger community in mind

Standards and Competencies

Standard WR 2: Personal Success
Standard WR 3: Employability and Entrepreneurship
Standard WR 6: Teamwork and Cooperation

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

Reading

CC: Reading Informational Text

Science

Social Studies

Writing

CC: Writing (9-10)

CC: Writing (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
- ☑ Mange 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

Unit 17 PROJECTS — Hours: 20

Performance Assessment(s):

Soldering Projects and Kits

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
10.A.2 Prioritize, plan and manage work to achieve the intended result
8.C.4 Reflect critically on past experiences in order to inform future progress

Standards and Competencies

Standard: General and Computer Safety
Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 4: Problem Solving
International Society of Certifited Electronics Technicians (ISCET) 7
7.1. Solder
7.2. Soldering Equipment
7.3. Desoldering Equipment
7.4. Safety

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

Reading

CC: Reading Informational Text

CC: Reading for Literacy in Science and Technical Subjects

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
- ☑ Mange 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

Unit 18 FINAL ASSESSMENT — Hours: 5

Performance Assessment(s):

Final Assessment

Leadership Alignment:

SkillsUSA Electronics Technology
Professional Development Program (PDP)
10.A.2 Prioritize, plan and manage work to achieve the intended result
10.B.1.b Manage time and projects effectively

Standards and Competencies

Standard: General and Computer Safety
Standard: Electronics - Units, Notations, Properties and Quantities
Standard WR 2: Personal Success
Standard WR 4: Problem Solving
Standard WR 5: Health and Safety
International Society of Certifited Electronics Technicians (ISCET) 1-3
1.1. Electrical Components and Measuring Instruments
1.2. Scientific Notation
1.3. Engineering Notation and Metric Prefixes
1.4. Metric Unit Conversions
2.1. Atoms
2.2. Electrical Charge
2.3. Voltage
2.4. Current
2.5. Resistance
2.6. The Electric Circuit
2.7. Basic Circuit Measurements
2.8. Electrical Safety
3.1. Ohm’s Law
3.2. Application of Ohm’s Law
3.3. Energy and Power
3.4. Power in an Electric Circuit
3.5. The Power Rating of Resistors
3.6. Energy Conversion and Voltage Drop in a Resistance
3.7. Power Supplies
3.8. Introduction to Troubleshooting
International Society of Certifited Electronics Technicians (ISCET) 4-6
4.1. Resistors in series
4.2. Current in a Series Circuit
4.3. Total Series Resistance
4.4. Ohm’s Law in Series Circuits
4.5. Voltage Sources in Series
4.6. Power in a Series Circuit

4.7. Circuit Ground
4.8. Troubleshooting
5.1. Resistors in Parallel
5.2. Voltage in Parallel Circuits
5.3. Total Parallel Resistance
5.4. Ohm's Law in Parallel Circuits
5.5. Power in a Parallel Circuit
5.6. Troubleshooting
6.1. Identifying Series-Parallel Relationships
6.2. The Wheatstone Bridge
6.3. Troubleshooting
International Society of Certifited Electronics Technicians (ISCET) 7
7.1. Solder
7.2. Soldering Equipment
7.3. Desoldering Equipment
7.4. Safety

Aligned to Washington State Standards

Arts

Communication - Speaking and Listening

Health and Fitness

Language

Mathematics

CC: Mathematical Practices (MP)

CC: Algebra (A)

CC: Number and Quantity (N)

Reading

CC: Reading for Literacy in Science and Technical Subjects

CC: Reading Informational Text

Science

Physical Science

Social Studies

Writing

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

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

21st Century Skills

LEARNING AND INNOVATION

Creativity and Innovation
- [x] Think Creatively
- [x] Work Creatively with Others
- [x] Implement Innovations

Creative Thinking and Problem Solving
- [x] Reason Effectively
- [x] Use Systems Thinking
- [x] Make Judgements and Decisions
- [x] Solve Problems

Communication and Collaboration
- [x] Communicate Clearly
- [x] Collaborate with Others

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

Information Literacy
- [x] Access and Evaluate Information
- [x] Use and Manage Information

Media Literacy
- [x] Analyze Media
- [ ] Create Media Products

Information, Communications, and Technology (ICT Literacy)
- [x] Apply Technology Effectively

LIFE AND CAREER SKILLS

Flexibility and Adaptability
- [x] Adapt to Change
- [x] Be Flexible

Initiative and Self-Direction
- [x] Mange Goals and Time
- [x] Work Independently
- [x] Be Self-Directed Learners

Social and Cross-Cultural
- [x] Interact Effectively with Others
- [x] Work Effectively in Diverse Teams

Productivity and Accountability
- [x] Manage Projects
- [x] Produce Results

Leadership and Responsibility
- [x] Guide and Lead Others
- [x] Be Responsible to Others