

Washtenaw Community College Comprehensive Report

UAT 129 Servicing Residential HVACR Electrical Systems (UA 6064) Effective Term: Spring/Summer 2019

Course Cover

Division: Advanced Technologies and Public Service Careers

Department: United Association Department

Discipline: United Association Training

Course Number: 129

Org Number: 28200

Full Course Title: Servicing Residential HVACR Electrical Systems (UA 6064)

Transcript Title: Srvc Resid HVACR Elec Sys 6064

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog

Reason for Submission: New Course

Change Information:

Rationale: New United Association course

Proposed Start Semester: Spring/Summer 2019

Course Description: In this course, students will identify common electrical terms and ordinary methods used in residential HVACR wiring. Electrical plans will be reviewed to illustrate proper installation techniques as well as the electrical safety involved. A hands-on lab will allow students to install and test residential electrical components. Participants will also be introduced to the UA software (UA Circuit Builder) developed for use on Blackboard and the resources available in the Instructor Resource Library (IRL). Limited to United Association program participants.

Course Credit Hours

Variable hours: No

Credits: 1.5

The following Lecture Hour fields are not divisible by 15: Student Min ,Instructor Min

Lecture Hours: Instructor: 22.5 Student: 22.5

The following Lab fields are not divisible by 15: Student Min, Instructor Min

Lab: Instructor: 1.5 Student: 1.5

Clinical: Instructor: 0 Student: 0

Total Contact Hours: Instructor: 24 Student: 24

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

General Education

Degree Attributes

Below College Level Pre-Reqs

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Identify common devices and illustrate proper electrical installation, testing and service practices of residential buildings.

Assessment 1

Assessment Tool: Written Test

Assessment Date: Spring/Summer 2019

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer Key

Standard of success to be used for this assessment: 80% of the students will score 100%

Who will score and analyze the data: UA Training Coordinator

2. Interpret residential electrical plans and drawings and install electrical devices using accepted electrical safety practices for hands-on applications.

Assessment 1

Assessment Tool: Skills Demonstration

Assessment Date: Spring/Summer 2019

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Skills Demonstration Checklist

Standard of success to be used for this assessment: 80% of students will score 80% or higher

Who will score and analyze the data: UA Training Coordinator

Course Objectives

1. Identify electrical symbols used in electrical blueprints and diagrams.
2. Identify electrical devices used in residential installation.
3. Demonstrate proper use of electrical testing equipment including digital multi-meter, amp probe, and megohmmeter.
4. Review safety procedures, standards, and policies when working with electrical circuits.
5. Interpret residential electrical plans and wiring diagrams for residential installation.
6. Complete UA Circuit Builder exercises located on the UA Blackboard IRL.
7. Complete hands-on wiring exercise using task sheet.

New Resources for Course

Course Textbooks/Resources

Textbooks

Gary Rockis /Suzanne M. Rockis. *Residential Wiring and Smart Home Technology* , 4th ed. ATP, 2018

Manuals

Periodicals

Software

Equipment/Facilities

Reviewer

Action

Date

Faculty Preparer:

Tony Esposito Faculty Preparer *Dec 13, 2018*

Department Chair/Area Director:

Marilyn Donham Recommend Approval *Jan 03, 2019*

Dean:

Brandon Tucker Recommend Approval *Jan 16, 2019*

Curriculum Committee Chair:

Lisa Veasey Recommend Approval *Mar 19, 2019*

Assessment Committee Chair:

Shawn Deron Recommend Approval *Mar 28, 2019*

Vice President for Instruction:

Kimberly Hurns Approve *Apr 07, 2019*