

## Clackamas Community College

### Online Course/Outline Submission System

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#### Section #1 General Course Information

**Department:** Apprenticeship

**Submitter**

First Name: Shelly

Last Name: Tracy

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**Course Prefix and Number:** APR - 116UM

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**# Credits:** 1

**Contact hours**

Lecture (# of hours): 11

Lec/lab (# of hours):

Lab (# of hours):

Total course hours: 11

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

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**Course Title:** Network Data Operations (NDO) Overview

**Course Description:**

This course will give the meterman apprentice an overview of smart meter operations and associated systems/servers including Meter Data Collection (MDC), Sensus, Total Metering Solution (TMS), and MV90, the industry standard for information collection and storage. The Meterman Apprentice will gain a better understanding of the process around the use of smart meter data, including validation of the usage to ensure accurate readings as well as an understanding of alarms the meter can trigger out in the field.

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**Type of Course:** Career Technical Apprenticeship

Can this course be repeated for credit in a degree?

**No**

Does this course map to any general education outcome(s)?

**No**

Is this course part of an AAS or related certificate of completion?

**Yes**

**Name of degree(s) and/or certificate(s):** Electrician Apprenticeship Technologies AAS

Are there prerequisites to this course?

**No**

Are there corequisites to this course?

**No**

Are there any requirements or recommendations for students taken this course?

**No**

Are there similar courses existing in other programs or disciplines at CCC?

**No**

Will this class use library resources?

**Yes**

Have you talked with a librarian regarding that impact?

**No**

Is there any other potential impact on another department?

**No**

Does this course belong on the Related Instruction list?

**No**

GRADING METHOD:

A-F Only

**Audit: No**

When do you plan to offer this course?

✓ **Not every term**

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

**No**

Will this course appear in the college catalog?

**No**

Will this course appear in the schedule?

**No**

**Student Learning Outcomes:**

Upon successful completion of this course, students should be able to:

1. deliver accurate, timely MDC data gathering and maintenance of energy usage information through operations of the MDC;
2. successfully work with Comm Server Operators and data to resolve TMS, Sensus, and MV90 meter communication errors;
3. provide first level resolution of communication failures and comm server errors,
4. provide support to metermen for the installation of Automated Meter Infrastructure (AMI) meters,
5. troubleshoot existing and new meter communication installations and alarms,
6. provide AMI support to billing specialists and other departments,
7. analyze energy consumption patterns to identify metering discrepancies,
8. ensure data used for billing and retail products and services reflects true operational characteristics,
9. investigate and work with Comm Server Operators to resolve MDC data validation errors,
10. work with Customer Information System (CIS) operations to resolve data errors,
11. execute ad hoc queries as needed to support other parties including management, Retail Products and Services, Customer Service Delivery, Energy Recovery Unit, vendors, and Meter Shop;
12. clean up and correct corrupt data as found during normal work,
13. add new services to the MDC databases,
14. troubleshoot existing and new communications, meter installations plan and test installations for communications and meter technologies.

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***This course does not include assessable General Education outcomes.***

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**Major Topic Outline:**

1. Accurate, timely MDC data gathering and maintenance of energy usage information through operations of the MDC.
2. Troubleshoot existing and new meter communication installations.
3. Analyze energy consumption patterns to identify metering discrepancies.
4. Ensure data used for billing and retail products.
5. Provide support to Metermen for the installation of AMI meters.

**Does the content of this class relate to job skills in any of the following areas:**

1. Increased energy efficiency **No**
2. Produce renewable energy **No**
3. Prevent environmental degradation **No**

4. Clean up natural environment **No**

5. Supports green services **No**

Percent of course: 0%

First term to be offered:

**Next available term after approval**

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