

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. CST

COURSE NUMBER: 1440

NUMBER OF CREDITS: 3

Lecture: 2 Lab: 0 OJT: 1

Course Title:

Advanced Telecommunications

Catalog Description:

Advanced Telecommunications will expand on the theory and topics from the Telecommunications I class including field experience with central office equipment and cabling. Students will work with broadband communications access systems and software and deploy services over fiber- and copper-based network architectures. In addition, students will become familiar with federal and state regulations and organizations related to the telecommunications industry.

Prerequisites or Necessary Entry Skills/Knowledge:

CST 1400

FULFILLS MN TRANSFER CURRICULUM AREA(S) (*Leave blank if not applicable*)

- Goal 1: Communication: By meeting the following competencies:
- Goal 2: Critical Thinking: By meeting the following competencies:
- Goal 3: Natural Sciences: By meeting the following competencies:
- Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- Goal 7: Human Diversity: By meeting the following competencies:
- Goal 8: Global Perspective: By meeting the following competencies:
- Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- Goal 10: People and the Environment: By meeting the following competencies:

Topics to be Covered

Data center equipment

Outside plant

Fiber optic networks

Legacy equipment

Data Center software applications

Telecommunication regulations

Telecommunications organizations

Telecommunications Certification

Student Learning Outcomes

Explain a data center network.

Explain the how the outside plant integrates with the data center.
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Connect communications network components.
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Configure data center hardware and software.
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Describe telecommunications regulations.
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Identify telecommunications organizations.
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Perform troubleshooting of outside plant technology.
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Perform troubleshooting of data center technology.
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Is this course part of a transfer pathway: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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*If yes, please list the competencies below
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Revised Date: 4/1/2021