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
### Student Learning Outcomes

- Explain a data center network.
- Explain the how the outside plant integrates with the data center.
- Connect communications network components.
- Configure data center hardware and software.
- Describe telecommunications regulations.
- Identify telecommunications organizations.
- Perform troubleshooting of outside plant technology.
- Perform troubleshooting of data center technology.

**Is this course part of a transfer pathway:** Yes ☐  No ☒

*If yes, please list the competencies below*

Revised Date: 4/1/2021