MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
COURSE OUTLINE

DEPT. CST   **COURSE NUMBER: 1400**

NUMBER OF CREDITS: 3   **Lecture: 2 Lab: 1 OJT: 0**

Course Title:
Telecommunications I

Catalog Description:
Telecommunications I will provide students with a broad overview of the telecommunications industry. Including knowledge and understanding of telecommunications history, terminology, tools, cable types, wiring components, basic fiber, coaxial cable, connector types, and basic telecommunications networks. This course prepares the student to be able to identify various equipment and technology in the inside and outside telecommunications plant, including wireless and cellular networks. Some of the latest technologies, including devices associated with the Internet of things are introduced in this course. Students will look at the various careers in telecommunications and future industry trends.

Prerequisites or Necessary Entry Skills/Knowledge:
None

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
The history of telecommunications, Equipment Services and Regulations
Current Telecommunication equipment and services Transmission systems
Wireless, cellular and communications equipment
Computer networking and communication systems
Careers in Telecommunications and future trends

Student Learning Outcomes
Describe the history, laws and mergers in the telecommunications industry that shape the industry today.
List and describe end user broadband devices and technology.
Describe the principles of networks and communication systems.
Identify and describe the equipment and functions of the telecommunication's central office and outside plant.
Identify and describe cell phone transmission.
Describe the devices and technology associated with the Internet of Things, Cloud computing and Virtual computing.
List and describe the various careers in Telecommunications.
Describe the future of Telecommunications.

Is this course part of a transfer pathway: Yes   ☐   No   ☒
*If yes, please list the competencies below

Revised Date: 3/29/2022