Faculty members are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

DEPT. CST COURSE NUMBER: 1400

NUMBER OF CREDITS: 3 Lecture: 2 Lab: 1

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>Telecommunication I</th>
</tr>
</thead>
</table>

| Catalog Description: | This course provides 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. |

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:
**Prerequisites or Necessary Entry Skills/Knowledge:**

STSK 0090 Reading Improvement 1

**Topics to be Covered (General)**

1. The history of telecommunications, Equipment Services and Regulations
2. Current Telecommunication equipment and services
3. Transmission systems
4. Wireless, cellular and communications equipment
5. Computer networking and communication systems
6. Careers in Telecommunications and future trends

---

**Student Learning Outcomes**

*2-3 Learning outcomes per credit
*Must be observable
*Must be measurable
*Must specify an action that is done by student learners
*More specific objectives can be identified on instructor syllabi for the course
*Must begin with an action verb

Please remove all * instructions before submitting.

1. Describe the history, laws and mergers in the telecommunications industry that shape the industry today.
2. List and describe end user broadband devices and technology
3. Describe the principles of networks and communication systems.
4. Identify and describe the equipment and functions of the telecommunications central office and outside plant
5. Identify and describe cell phone transmission
6. Describe the devices and technology associated with the Internet of Things, Cloud computing and Virtual computing
7. List and describe the various careers in Telecommunications
8. Describe the future of Telecommunications

See SAMPLE EXPECTED LEARNING OUTCOMES STATEMENTS and ACTION VERB LIST FOR COURSE OUTCOMES in the Minnesota West Curriculum Development Manual which can be accessed at [https://www.mnwest.edu/faculty-resources/curriculum-manual](https://www.mnwest.edu/faculty-resources/curriculum-manual)

**Is this course part of a transfer pathway:**

- Yes ☐
- No ☒

*If yes, please list the competencies below

---

Revised Date: Click or tap here to enter text.