### Course Outline

**DEPT. CST**

**COURSE NUMBER:** 1420

**NUMBER OF CREDITS:** 3

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Lab</th>
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<td>1</td>
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**Course Title:**
Convergence Technologies

**Catalog Description:**
Convergence Technologies is study of telecommunications convergent technologies including telephone, LAN, WAN, wireless, voice, video, and internet protocol. This course Introduces the student to Voice, Video and Integrated data (VVID) over IP networks to provide seamless and secure communications solutions to business and home technology needs.

**Prerequisites or Necessary Entry Skills/Knowledge:**
CST 1190

**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**

- Technology trends
- Video compression, encoding and transport in open and closed networks
- Digital rights management
- Network Architecture
- Quality of Service
- Secure network services
### Student Learning Outcomes

<table>
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<th>Competency</th>
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<td>Identify industry standards and Protocols for converged networks.</td>
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<td>Define convergence.</td>
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<td>Troubleshoot converged networks.</td>
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<td>Describe Multimedia Architecture.</td>
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<td>Explore current VOIP implementations.</td>
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<td>Identify methods for providing video services through a converged solution.</td>
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**Is this course part of a transfer pathway:**  
Yes ☐  No ☒

*If yes, please list the competencies below*

Revised Date: 3/17/2021