# ELEC1102 - Introduction to Electric Circuit Theory

| | |
|---|---|
| Credits: | 4 (2/2/0) |
| Description: | This introductory course provides the student with knowledge of electrical theory including atomic structure, Ohm's law, series circuits, parallel circuits, complex circuits and sine wave principles as related to the National Electrical Code. |
| Prerequisites: | |
| Corequisites: | |
| Pre/Corequisites*: | |
| Competencies: | 1. Demonstrate electrical safety.<br>2. Demonstrate basic meter skills.<br>3. Apply electrical formulas.<br>4. Describe atomic structure.<br>5. Apply DC theory.<br>6. Troubleshoot DC circuits.<br>7. Diagram DC circuits.<br>8. Construct DC circuits.<br>9. Apply National Electrical Code to electrical theory.<br>10. Identify electrical symbols.<br>11. Identify AC properties.<br>12. Identify electrical circuit components. |
| MnTC goal areas: | None |

**Can be taking as a Prerequisite or Corequisite.*

© 2026 Minnesota State Community and Technical College.
We reserve the right to periodically update information without notice.
The information in this publication should not be regarded as contractual in nature.