

# Blueprint for Instruction and Assessment

## Electronic Technologies

14.1001.00



Domain	Related Standards	Instructional Time
<b>Domain 1</b> Fundamentals	<b>STANDARD 2.0</b> APPLY MATHEMATICAL PROCESSES TO PROBLEMS IN ELECTRONIC TECHNOLOGY <b>STANDARD 3.0</b> APPLY MEASUREMENTS TECHNIQUES TO PROBLEMS IN ELECTRONIC TECHNOLOGY <b>STANDARD 4.0</b> UNDERSTAND SCHEMATICS, BLUEPRINTS, AND TECHNICAL DRAWINGS UTILIZED IN ELECTRONIC TECHNOLOGIES <b>STANDARD 5.0</b> DETERMINE ELECTRICAL QUANTITIES, UNITS, AND CIRCUITS <b>STANDARD 6.0</b> APPLY FUNDAMENTALS OF ALTERNATING CURRENT (AC) <b>STANDARD 7.0</b> SOLVE MAGNETISM AND ELECTROMAGNETISM CIRCUIT PROBLEMS	40-50%
<b>Domain 2</b> Calculations	<b>STANDARD 8.0</b> ASSEMBLE RC, RL, AND RCL CIRCUITS <b>STANDARD 9.0</b> DETERMINE TRANSFORMER RATINGS <b>STANDARD 10.0</b> CALCULATE AND BUILD POWER SUPPLIES PROBLEMS <b>STANDARD 11.0</b> DESCRIBE ELECTRIC MOTORS AND THEIR USE IN ELECTRONICS	30-40%
<b>Domain 3</b> Applications	<b>STANDARD 12.0</b> CONTSTRUCT AND ANALYZE DIODES, SEMICONDUCTORS, AND CONTROL CIRCUITS <b>STANDARD 13.0</b> INVESTIGATE FREQUENCY OSCILLATORS <b>STANDARD 14.0</b> ANALYZE INTEGRATED CIRCUIT TECHNOLOGY <b>STANDARD 15.0</b> ANALYZE DIGITAL SIGNAL PROCESSING CIRCUITS	15-20%
<b>Domain 4</b> Safety	<b>STANDARD 1.0</b> D PRACTICE SAFE WORKING PROCEDURES IN THE ELECTRONIC TECHNOLOGY ENVIRONMENT	5-10%

Content domains are bodies of knowledge, skills, or abilities to be taught and assessed. They illustrate the relationship among technical standards, instructional time, and student success on the Technical Skills Assessment. This blueprint corresponds with the technical standards endorsed on May 24, 2017.

