

# Magnetostatics

After completing this section, students should be able to do the following.

- Apply cross product (right-hand rule) to two vectors.
- Visualize magnetic field from a straight conductor
- Calculate the magnetic force
- Explain the operation of a simple DC-motor
- Apply Ampere's Law to derive a magnetic field from given currents.
- Calculate the magnetic energy of simple symmetrical structures carrying currents.
- Describe inductance through a flux of the magnetic field
- Conceptually explain what inductance is
- Calculate the inductance for various conductor configurations.