

<b>Course Code</b>	<b>Course Name</b>
PHS-G-CC-1-1-TH	Mechanics
PHS-G-CC-2-2-TH	Electricity and Magnetism
PHS-G-CC-3-3-TH	Thermal Physics and Statistical Mechanics
PHS-A SEC-B-TH	Renewable Energy and Energy Harvesting
PHS-G-CC-4-4-TH	Wave and Optics
PHS-A SEC-B -TH	Electrical Circuits and Network Skills
PHS-G-DSE-A-TH	Analog Electronics
PHS-G-DSE-B-TH	Digital Electronics

## **Course Outcome**

1) Create basic understanding of Newtonian Mechanics, 2) Learn the basic mathematical tools required.

1) Understand basic laws that govern electricity and magnetism, 2) Learn how they couple to each other to create electromagnetic waves.

1) Understand heat as a form of energy flow 2) Understand different thermal properties of matter 3) Learn different classical and quantum statistics of macroscopically large number of particles.

1) Learn about different energy sources and their availability and shortcomings 2) Learn about renewable energies and greener energy harvesting methods.

1) Understand general properties of waves 2) Understanding different phenomena associated with wave nature of light.

1) Understanding basic principles of electrical circuits and networks 2) Learn about their design principles.

1) Understanding the motion of electrons in different devices like diodes and transistor 2) Understand the design principles behind these devices.

1) Understand binary number system and binary logic 2) Understand logic gates 3) Learn how to implement them to make counters and memory devices etc 4) Learn about conversion techniques between binary and analog technologies.