

Course Number	Course	Credit hours	Prerequisite
0302203	General Physics (3)	3	0300122

Electricity and magnetism: Faraday's law and Lenz's law, self-inductance and mutual inductance, RLC-circuits, alternating current, transformers, rectifiers, filters, Maxwell's equations and electromagnetic waves. Universal gravitation: law of universal gravitation, gravitational field and potential energy, satellites. Fluid mechanics: pressure, Archimedes's principle, Bernoulli's equation, applications.