

MTH 410 ELECTROMAGNETISM: (3 Units) L30: PO: T 15

Maxwell's field equations. Electromagnetic waves and Electromagnetic theory of lights. Plane electromagnetic waves in non-conducting media, reflection and refraction at plane boundary. Wave guides and resonant cavities. Simple radiating systems. The Lorentz Einstein transformation. Energy and momentum. Electromagnetic 4-vectors. Transformation of (E.H.) fields. The Lorentz force.