

# **ISE**



**Notion Tip:** Drag the handle to the left of any to-do item to re-order. Color coordinate your to-do's by right-clicking and selecting color.

# APPLIED MATHEMATICS

#### **MODULE 2**

- RANK OF MATRIX AND SYSTEM OF EQUATION
- ☐ Types of matrices: Hermitian, Skew-Hermitian, Unitary and Orthogonal matrix
- Rank of a matrix using row echelon forms, reduction to normal form
- System of homogeneous and non-homogeneous equations, their consistency and solutions
- Linearly dependent and independent vectors

# ENGINEERING PHYSICS

### **MODULE 1**

- ☐ Principle of lasers

## **MODULE 2**

- ☐ Semiconductors
- ☐ Dielectrics
- ☐ Liquid Crystals

# ENGINEERING MECHANICS

#### MODULE 1

- ☐ Coplanar Forces: Resolution and Composition of Forces
- ☐ Space Forces

### **MODULE 2**

- ☐ Kinematics of Rigid Bodies

ISE 1

☐ Solution of system of linear algebraic equations by (a) Gauss Seidal method (b) Jacobi iteration method

### MODULE 3

 Partial Differentiation and Application

Functions of several variables, Partial derivatives of first and higher order (definition using limits and simple problems)

☐ Differentiation of composite functions

☐ Maxima and minima of a function of two independent variables

☐ Introduction of
Jacobian of two and three
independent variables
(sim le roblems)

ISE 2

ISE 3