# **TOTAL EXAMINATION PROGRAM PEO Syllabus of Examinations, 2017 Edition**

## **ENGINEERING PHYSICS**

### INTRODUCTION

A full set of Engineering Physics examinations consists of the following, three-hour examination papers and an engineering report. Candidates will be assigned examinations based on an assessment of their academic background. Examinations from discipline syllabi other than those specific to the candidates' discipline may be assigned at the discretion of PEO's Academic Requirement Committee.

### **BASIC STUDIES EXAMINATIONS**

04-BS-1	Mathematics
04-BS-2	Probability and Statistics
04-BS-3	Statics and Dynamics
04-BS-4	Electric Circuits and Power
04-BS-5	Advanced Mathematics
04-BS-6	Mechanics of Materials
04-BS-7	Mechanics of Fluids
04-BS-8	Digital Logic Circuits
04-BS-9	Basic Electromagnetics
04-BS-10	Thermodynamics
04-BS-11	Properties of Materials
04-BS-12	Organic Chemistry
04-BS-15	<b>Engineering Graphics and Design Process</b>

# PROFESSIONAL EXAMS - SPECIFIC TO ENGINEERING PHYSICS

## **GROUP A**

17-Phys-A1	Classical Mechanics
17-Phys-A2	Statistical Physics
17-Phys-A3	Electromagnetics
17-Phys-A4	Quantum Mechanics
17-Phys-A5-A	Electronic Materials and Devices
17-Phys-A5-B	Analog and Digital Electronic Circuits
17-Phys-A6	Solid State Physics
17-Phys-A7	Optics

#### GROUP B

GKOOF D	
17-Phys-B1	Radiation Physics
17-Phys-B2	Electro-Optical Engineering
17-Phys-B3	Digital Systems and Computers
17-Phys-B4	Signals and Communications
17-Phys-B5	Systems and Control
17-Phys-B6	Applied Thermodynamics and Heat Transfer
17-Phys-B7	Structure of Materials

## **COMPLEMENTARY STUDIES**

11-CS-1 11-CS-2 11-CS-3 11-CS-4	Engineering Economics Engineering in Society – Health & Safety Sustainability, Engineering and the Environment Engineering Management
3.2	Engineering Report