TOTAL EXAMINATION PROGRAM
PEO Syllabus of Examinations, 2016 Edition

<u>MECHANICAL ENGINEERING</u>

INTRODUCTION

A full set of Mechanical Engineering 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-15	Engineering Graphics and Design Process
04-BS-16	Discrete Mathematics

PROFESSIONAL EXAMS – SPECIFIC TO MECHANICAL ENGINEERING

GROUP A

16-Mec-A1	Applied Thermodynamics and Heat Transfer
16-Mec-A2	Kinematics and Dynamics of Machines
16-Mec-A3	System Analysis and Control
16-Mec-A4	Design and Manufacture of Machine Elements
16-Mec-A5	Electrical and Electronics Engineering
16-Mec-A6	Advanced Fluid Mechanics
16-Mec-A7	Advanced Strength of Materials

GROUP B

16-Mec-B1	Advanced Machine Design
16-Mec-B2	Environmental Control in Buildings
16-Mec-B3	Energy Conversion and Power Generation
16-Mec-B4	Integrated Manufacturing Systems
16-Mec-B5	Product Design and Development
16-Mec-B6	Fluid Machinery
16-Mec-B7	Aero and Space Flight
16-Mec-B8	Engineering Materials
16-Mec-B9	Advanced Engineering Structures
16-Mec-B10	Finite Element Analysis
16-Mec-B11	Acoustics and Noise Control
16-Mec-B12	Robot Mechanics
16-Mec-B13	Biomechanics

COMPLEMENTARY STUDIES

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