# TOTAL EXAMINATION PROGRAM PEO Syllabus of Examinations, 2016 Edition

## **NAVAL ARCHITECTURAL ENGINEERING**

#### INTRODUCTION

A full set of Naval Architectural 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**

Mathematics
Probability and Statistics
Statics and Dynamics
Electric Circuits and Power
Advanced Mathematics
Mechanics of Materials
Mechanics of Fluids
Basic Electromagnetics
Thermodynamics
Properties of Materials
Organic Chemistry
Biology
Engineering Graphics and Design Process

### PROFESSIONAL EXAMS - SPECIFIC TO NAVAL ARCHITECTURAL ENGINEERING

# **GROUP A**

16-Nav-A1	Fundamentals of Naval Architecture
16-Nav-A2	Hydrodynamics of Ships (I): Resistance and Propulsion
16-Nav-A3	Hydrodynamics of Ships (II): Ship Motion
16-Nav-A4	Ship Structure and Strength of Ships
16-Nav-A5	Ship Design
16-Nav-A6	Advanced Strength of Materials (16-Mec-A7)

## **GROUP B**

16-Nav-B1	Applied Thermodynamics and Heat Transfer (16-Mec-A1)
16-Nav-B2	Marine Engineering (98-Mar-A7)
16-Nav-B3	Small Commercial Ships
16-Nav-B4	Advanced Structural Analysis
16-Nav-B5	Ship Production and Shipyard Management
16-Nav-B6	Design and Manufacture of Machine Elements (16-Mec-A4)
16-Nav-B7	Environmental Control in Ships (98-Mar-B2)
16-Nav-B8	Ocean Engineering and Offshore Structures
16-Nav-B9	Advanced Fluid Mechanics (16-Mec-A6)
16-Nav-B10	Finite Element Analysis (16-Mec-B10)

## **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	