

PROGRAMME EDUCATIONAL OBJECTIVES

PEO
01

GENERATE INNOVATIVE IDEAS OR PRODUCTS IN LOCAL OR INTERNATIONAL INDUSTRY OR GOVERNMENT AND WORK IN MULTIDISCIPLINARY TEAMS IN IMPLEMENTING THESE SOLUTIONS IN PRACTICE.

PEO
02

ESTABLISH THEMSELVES IN A DIVERSE RANGE OF CAREERS IN TECHNOLOGY-DRIVEN TRANSDISCIPLINARY FIELD WITH JAPANESE WORK CULTURE OR ENGAGE IN BUSINESS OPPORTUNITIES.

PEO
03

DEMONSTRATE ETHICAL RESPONSIBILITY THROUGH INVOLVEMENT WITH COMMUNITY AND/OR PROFESSIONAL ORGANIZATION AND/OR CONTRIBUTE TOWARDS A SUSTAINABLE SOCIETY.

PEO
04

RECOGNIZE THE IMPORTANCE OF AND ENGAGE IN LIFE-LONG LEARNING THROUGH FORMAL GRADUATE-LEVEL EDUCATION.

PROGRAMME OUTCOME

P01

Ability to apply knowledge of mathematics, science, engineering fundamentals and Mechanical Precision Engineering (MPE) to the solution of complex engineering problems.

ENGINEERING KNOWLEDGE (KW)

P02

Ability to identify, formulate, analyse and research literature on complex engineering problems to reach substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PROBLEM ANALYSIS (THPA)

P03

Ability to design and develop MPE solutions to complex engineering problems that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

DESIGN/DEVELOPMENT (THDS)

P04

Ability to conduct investigation into complex problems on MPE using research based knowledge and research methods learned in iKohza and synthesis of information to provide valid conclusions.

INVESTIGATION (THI)

P05

Ability to apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities with an understanding of the limitations.

MODERN TOOL USAGE (SCMT)

P06

Ability to apply contextual knowledge to assess societal, health, safety, legal and cultural issues and his/her responsibilities relevant to professional engineering practice.

THE ENGINEER AND SOCIETY (AD)

P07

Ability to explain, compare and summarize the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

ENVIRONMENT AND SUSTAINABILITY (GCS)

P08

Ability to apply ethical principles and commit to professional ethics, responsibilities and norms of engineering practice, in multicultural society based on Islamic, ASEAN and Japanese cultures.

ETHICS (GSE)

P09

Ability to communicate effectively on complex engineering activities with the engineering community and with society at large, sometimes in Japanese.

COMMUNICATION (CS)

P10

Ability to function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.

INDIVIDUAL AND TEAM WORK (TW)

P11

Ability to recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

LIFE-LONG LEARNING (SC)

P12

Ability to demonstrate knowledge and understanding of engineering and management principles and apply these to one's own work.

ENGINEERING PROJECT MANAGEMENT AND FINANCE (ES)