PEOs and POs of M.Tech. in Control and Industrial Automation

Programme Educational Objective (PEO)

The **Programme Educational Objectives (PEOs)** of the M.Tech. degree in 'Control and Industrial Automation' are:

PEO-1: Post Graduate (PG) students should be competent enough to tackle problems related to their profession, be it in industry or in an academic institution in India or abroad. (**Preparation**)

PEO-2: PG students are expected to solve Control Engineering as well as Industrial Automation related problems and also to pursue research in the appropriate technological context. (**Core competence**)

PEO-3: PG students should have strong scientific and engineering temperament to work individually as well as in a team to comprehend, analyse, design, and create acceptable solutions for the real life problems. (**Breadth**)

PEO-4: They should exhibit ethics, professionalism, multidisciplinary approach, entrepreneurial thinking and do effective communication in their profession. (**Professionalism**).

PEO-5: PG students should engage in life-long self-learning for a successful professional career. (**Learning Environment**)

Programme Outcome (PO)

Programme Outcomes: M. Tech. programme in Control and Industrial Automation under Department of Electrical Engineering, National Institute of Technology Silchar has been designed to develope the following skills and abilities amongst the successful students, as stated under (a) through (k) below, in conformity with the POs indicated by ABET in 2006:

a) The ability to apply knowledge of mathematics, science, and engineering in solving control and industrial automation related problems.

b) The ability to design a controller or a system related to control engineering and automation for a definite task as well as to analyse and interpret the data for corrective measure, if any.

c) An ability to design a controller or a system related to control engineering and automation to meet desired realistic needs considering practical constraints pertaining to safety, environmental, economic, social, ethical, manufacturability, and sustainability.

d) The ability to function on multidisciplinary tasks and a multidisciplinary teams as the need arises.

e) The ability to formulate and solve challenging control engineering problems by the use of appropriate technical methods.

f) The ability to demonstrate the knowledge of professional and ethical responsibilities.

g) The ability to communicate effectively in both oral and written forms.

h) The ability to analyse the impact of engineering solutions in global, economic, environmental, and social perspectives.

i) The ability to develop confidence for self-learning and to engage in lifelong learning.

j) The urge to participate/do the needful to update knowledge on contemporary control and industrial automation related issues.

k) Graduates will be good citizens with sense of responsibility.

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