



भारत सरकार/GOVERNMENT OF INDIA  
पत्तन, पोत परिवहन और जलमार्ग मंत्रालय  
MINISTRY OF PORTS, SHIPPING AND WATERWAYS  
नौवहन महानिदेशालय, मुंबई  
DIRECTORATE GENERAL OF SHIPPING, MUMBAI

**DGS Circular No. 09 of 2022 [EAC Branch (Engineering)]**

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**Subject: Recommendatory guidelines for inclusion of multi-disciplinary courses in Marine Engineering stream from academic year 2022-2023 – reg.**

The International Maritime Organization (IMO) based on the proposal of Member states has initiated a key strategic direction plan to integrate new and advancing technologies in the marine regulatory frame work. Accordingly, IMO has initiated Regulatory Scoping Exercise (RSE) for the use of Marine Autonomous Surface Ships (MASS) and set target completion year to deploy goal-based instrument for MASS suitable for all identified four degrees of autonomy by the year 2025.

Recalling the global education development reflected in the Goal 4 (SDG4) of the 2030 Agenda for Sustainable Development, adopted by India in 2015, seeks to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” by 2030. Towards achieving this goal there is a need to reconfigure the existing education system to support and foster learning, so that the critical targets and goals (SDGs) of the 2030 Agenda for Sustainable Development can be met.

Recalling further that in accordance with the Merchant Shipping (Maritime Labour) Rules, 2016 the Directorate, as the Indian Maritime Administration, has been entrusted with the responsibilities to encourage career and skill development and employment opportunities for seafarers, to provide the maritime sector with a stable and competent workforce for the upcoming technological developments.

Noting that the world is undergoing rapid changes in the knowledge landscape and that there have been various dramatic scientific and technological advances, such as the rise of big data, machine learning, and artificial intelligence and that they are being gradually introduced into the ships machinery and control system and that many unskilled jobs worldwide likely to be taken over by machines. Hence there is a need for a skilled work force to cater upcoming technology which will be in greater demand in the years to come.