

Water Institute - A Centre of Excellence

M Tech Course in Integrated Water Resources Management (IWRM) (for graduates in Engineering and postgraduates in Physical Sciences)

Relevance: The proposed M Tech course in IWRM is a **unique course and it attempts** to look at water resources development and management from a holistic or ecosystem approach in the spirit of the recommendations of the Rio Summit, Dublin Conference (International Conference on Water and Environment) and the Stockholm Water Meets. Integrated Water Resources Management recognizes the interdependency of different uses of water and the importance of participatory approach and gender issues. It is relevant for a country like India, where single sector approach is the usual norm.

Course Content in Nutshell: The course introduces the scholars to exercises to match water availability and use, seek to develop alternate land use and water allocation policies, legal and institutional arrangements from the local watersheds to the river basin scale, methods to achieve participatory approach, EIA, BCA and ecosystem approach in water management. The water quality considerations and other aspects related to water and environment, especially in the context of global climate change also will be covered by the course. Application of modeling, systems approach, isotopes, RS/GIS and DSS in water management will form part of the course. Professional training and thesis work are integral parts of the course.

Scope: Water management is gaining more importance in the context of water deficiency, water quality deterioration and degradation of aquatic ecosystems. Since water resources development and management in future is going to be based on IWRM, there will be considerable opening for those specialized in this area in government and private sectors. The international agencies, consultants and NGOs may require people with knowledge in IWRM for dealing with the water sector.

Eligibility: Graduates in engineering and postgraduates in physical science subjects with at least one subject dealing with mathematics are eligible for this two-year inter-disciplinary course. Those interested in pursuing the course may download the application form from the web of Karunya University (www.karunya.edu) and send to the Admissions Officer, Karunya University. They will be informed of the admission procedures in due course.

Course in Progress: The M Tech course in IWRM was initiated in 2009-10. Apart from the faculty of Water Institute, Prof Yoram Oren from Ben-Gurion University, Israel, Prof Gunar Jacks from KTH, Sweden, and Prof H Raman, formerly of IITM are handling the classes for the M Tech students. Two of our final year students carried out their project work abroad, one in Technical University Bergacademic Freiberg, Germany and another in Universidade Federal De Ouro Preto – UFOP, Brazil. One of our first year students is proceeding to China to do his internship for 4 months.

About Water Institute: Six scholars with Master of Technology degrees from IITs, NITs and reputed universities abroad are doing their Ph D in the Water Institute. MoUs are in operation with BIDR (Israel), RWTH (Aachen), etc. Research collaboration and consultancy works have been initiated with the support of MoEF, DST, WI, Wilbur Smith, etc.

For further information, please contact:

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