

Online Certificate Training Programme Integrated Wastewater and Septage Management (IWSM) – A Planning Approach for Practitioners

Concept Note

About the Training Program

This certificate course helps to understand all aspects of Integrated Wastewater and Septage Management across the service value chain and further planning and management of liquid waste at city level. The course uses the Case Method for training and is mix of presentations, videos, exercise and case studies. This is an intensive 9 days course consisting of 90 min online session every day with quiz. A separate session is arranged at the end of the course specially dedicated to resolve the doubts and provide more clarification to the participants.

This module is developed by NIUA, New Delhi in partnership with ESF, Pune. The IWSM module is structured as follows: -

Part A, Presentation Slides: <https://scbp.niua.org/?q=content/integrated-wastewater-and-septage-management-planning-approach-part>

Part B, Learning Notes: <https://scbp.niua.org/?q=content/integrated-wastewater-and-septage-management-planning-approach-part-b>

Part C, Workbook: <https://scbp.niua.org/?q=content/integrated-wastewater-and-septage-management-planning-approach-part-c>

Objective

To build the capacities of the participants so that they can understand, analyze and apply the learnings in the real-life scenario for technical and financial planning, execution and financial management of Integrated Wastewater and Septage Management at a city level with some case studies in India.

Target Audience

The participants should be from engineering background with experience on liquid waste management projects. The participants should be ready to spend 90 mins. per day from 8th September to 18th September 2020 for the course and required to solve the quiz timely.

Certificate

In order to be eligible for a certificate at the end of the training course, the participant has to attend all the sessions, complete the given exercises and complete the quiz. Upon evaluation of the attendance, exercise and quiz of the participants, a certificate will be provided to the participant.

AGENDA

The 90 minutes session will include the introduction, session presentation, case studies and quiz. The session wise agenda of the training programme is as follows: -

Date	Session	Topic	Contents	Duration
Tuesday 15 September, 2020	1a	Sustainable Sanitation and Water Management	Natural and built environment Environmental sanitation EcoSan Concept Waste products Flow of waste products	90 Min.
	1b	Sanitation Systems	Sanitation systems - Wet & Dry systems, Sewered systems, Non sewerred systems and Hybrid systems Functional groups - User Interface, Containment, Collection and conveyance, Treatment and Reuse or Disposal	
Wednesday 16 September, 2020	2a	Sanitation Technologies	User interface - Flush toilet, UDDT, Vacuum Toilet Containment systems - Twin Pit, Septic Tank Collection & Conveyance systems - Gravity sewers, solid free sewers, simplified sewers, vacuum trucks, vacu tugs	90 Min.
	2b	Building sanitation systems	Offsite sanitation system Onsite sanitation system Hybrid sanitation system	
Thursday 17 September, 2020	3a	Liquid Waste Management	Centralized wastewater management and Decentralized wastewater management - key components and aspects	90 Min.
	3b	Aspects of Decentralized Wastewater Management	Enabling environment Economic aspects Technical aspects Legal aspects Regulatory aspects Social aspects	
Friday 18 September, 2020	4	Decentralized Wastewater Management	Quantifying black and grey water for following scenarios - Domestic, Commercial, Public Utility Diurnal variation of wastewater generation Handouts on Septic Tank (IS 2470 Part I & II) Handout on Code of Basic Requirements for Water supply, Sanitation and Drainage (IS 1172)	90 Min.
Monday 21 September, 2020	5	Understanding Faecal Sludge and Septage Management	Need of FSSM Components of FSSM Planning for FSSM- Quantification of Septage, On demand vs Scheduled desludging Approaches for FSS Treatment - Co	90 Min.

			Treatment at STP or MSW plant, FSTP, Deep Row Entrenchment	
Tuesday 22 September, 2020	6a	Stakeholder Management	Identification of stakeholders Characterisation of stakeholders IEC campaign	90 Min.
	6b	FSSM Planning	The participants will be using the information provided in Session 6 to quantify the septage and faecal sludge. They will also be calculating the number of vacuum trucks required for providing collection service for the quantified sludge	
Wednesday 23 September, 2020	7a	Faecal Sludge and Septage Treatment	Treatment objectives Treatment stages Treatment units FSTPs in India	90 Min.
	7b	Financial aspects of Faecal Sludge and Septage Management	Financing FSSM Financial transaction in FSSM Financial models	
	7c	Operation and Maintenance cost for FSSM	Calculating the O&M cost for collection - conveyance and treatment of faecal sludge and septage	
Thursday 24 September, 2020	8a	Wastewater Treatment Principles	Objectives of wastewater treatment Treatment processes and stages Component of Sewage Treatment Plant Multi barrier approach Layout of STP	90 Min.
	8b	Wastewater Treatment Technologies	Non mechanized treatment systems Mechanized treatment systems Selection criteria	
Friday 25 September, 2020	9	Q&A, discussions, feedback, final assessment		90 Min.