

ONLINE PROFESSIONAL CERTIFICATION COURSE ON



INTEGRATED MUNICIPAL SOLID WASTE MANAGEMENT

Deep Specialization in
Circular Economy & Integrated
Municipal Solid Waste Management



November 5, 2024 – January 31, 2025

Administrative Staff College of India

 www.asci.org.in

1 Why is this certification course important?

Untreated solid waste is a threat to public health and the environment. Urban India produces over 62 million tonnes of Municipal Solid Waste annually, out of which only 36% is scientifically processed. Over 3000 legacy dump sites need scientific remediation and capping. The waste generation is on a steep rise with new waste streams emerging that are complex and difficult to handle. Municipalities in India are giving high priority to improve the situation. Government programmes like Swachh Bharat Mission (SBM) 2.0, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0, and Smart city Mission drive reforms and invest in Municipalities for implementing Integrated Municipal Solid Waste Management (IMSWM) systems.

However, the skills required to plan and implement IMSWM with an emphasis on a circularity principle are not available in the market to meet the emerging demand. This lack of human resource was reflected in an ASCI survey conducted on scientific solid waste management among practitioners across seven states. Absence of human resources with practical and deep skills & knowledge is identified as a primary bottleneck for achieving their aspiration and service level benchmarks.

Local and state governments often depend on project management consultants, technical advisory services and academic institutions to address the capacity gaps. ULBs as well as consultancy firms find it difficult to deploy professionals having a comprehensive and practical knowledge on integrated municipal waste management. **Absence of a dedicated and intense academic course on IMSWM in engineering, urban planning or social science streams exasperated the capacity gaps.**

According to the estimates carried by ASCI, India needs over 24000 qualified professionals in IMSWM by 2030 over and above the municipal staff and environmental engineers/planners employed by them.

Administrative Staff College of India is committed to filling the skilled human resource gap by offering a practical online course on Integrated Municipal Solid Waste Management. This course will enhance the knowledge and skills of the young scholars and professionals to support ULBs in effectively implementing IMSWM and complying to the MSW rules 2016 & its amendments.

This course will provide deep technical and soft skills to understand and analyse the complexity of waste management, the strengths and weaknesses of a city's waste management system and apply the necessary skills to solve various problem confronting urban areas. **The capstone project will enable the participants to hone their skills in a real-life context.**

The course is structured to suit the context of national government's efforts to improve urban sanitation through SBM 2.0 and contribute to India's attainment of sustainable development goals.

2 What is the core objective of the course?

The primary objective of the certification course is to build leadership in Integrated Municipal Solid Waste Management with deep skills and new knowledge for sector transformation and for promoting circularity.



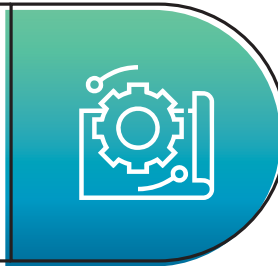
3 What are the learning outcomes?

At the end of the course, the participants will be able to:



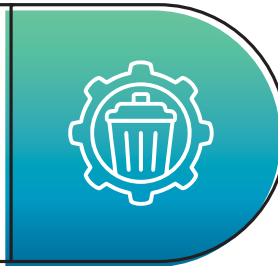
> Understand regulatory compliance, waste governance and mainstream circularity.

Develop a multi-year climate-resilient strategic plan for integrated municipal waste management for a town/city <



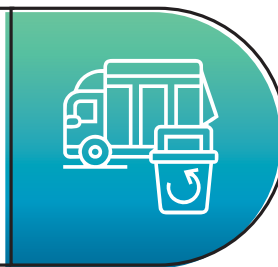
> Develop a deep understanding of technology choices (collection, transportation, DRC, Transfer stations, processing and disposal) - cost and land implications and O&M issues - for making informed choices

Appreciate the importance of decentralised waste management and gain the know-how to operationalise it <



> Appreciate emerging innovations and start-ups working in this sector

Develop and operationalise micro plans for waste management <





> Develop systems for integration of formal and informal sanitation workers considering gender issues and safety and wellbeing of sanitation workers.

Appreciate the importance of citizen engagement, behaviour change communication (BCC) and create a BCC plan <



> Knowledge and skills of financing, developing a financial operating plan for integrated waste management

Develop PPP development process and contract management. <



> Exposure to national and international best practices and innovations focusing on climate impact

Acquire leadership, negotiation and stakeholder management skills for effective implementation of plans <



> Develop practical action plan and skills to operationalise the above aspects in a real-life context.

4 What would the course cover?



The course has following modules covering the scientific, technological, managerial and socio-economic aspects of the integrated municipal solid waste management value chain.

MODULE

1

Concepts, Waste Governance, Policy and Regulations

- Introduction to municipal solid waste management
- Policies and regulations to tackle MSWM
- Waste governance in India
- Open burning practices and air pollution

MODULE

2

Mainstreaming Circularity in Waste Management

- Achieving sustainable development goals through principles of circularity and ISWM

MODULE

3

Quantifying, Characterization and Mapping MSW at ULB

- Municipal waste generation and waste characterisation
- Environmental standards and regulations
- Introduction to Waste flow mapping - Assessment tools for mapping waste flow in the city

MODULE

4

Strategic Planning and Micro Planning

- Climate-resilient strategic planning methodology
- Micro planning at the ward level
- Monitoring and evaluation

MODULE

5

Decentralized Waste Management & Material Recovery

- Decentralised waste management at household and community level
- Establishing material recovery facilities

MODULE

6

Waste Segregation, Collection, Transportation

- Ensuring waste segregation
- Efficient waste collection and transportation

MODULE

7

Waste Processing and Safe Disposal Practices

- Organic waste management
- Product recovery and waste recycling
- Incineration and energy recovery
- Waste disposal and landfill planning
- Legacy waste management

MODULE

8

Financing, Business Models, PPP options, Contract management.

- Financing mechanisms in IMSWM including circular financing
- Public-Private partnerships in IMSWM
- Contract management and municipal tendering
- Preparing a detailed project report (DPR) – key considerations
- Climate financing

MODULE

9

Socio-economic and Gender aspects of Waste Management

- SWM in informal settlements
- Gender and waste management
- Workers health and safety
- Integrating the informal sector

MODULE

10

Behaviour Change Communication

- Principles of nudge theory
- Developing BCC communication strategy
- Measuring the impact of BCC

MODULE

11

Special Wastes

- Plastic waste management
- C& D waste management
- EPR

MODULE

12

Innovations and Good Practices

- Best practices in waste management
- Best practices in entrepreneurship and innovations in MSWM

MODULE

13

International Experiences

- International good practices
- Reduce, reuse and recycle in operation at scale

5 What is the duration of the course and delivery model?

The programme would be delivered online over a period of three months and has two components:

I. Coursework **2.5 months**

- The course will be delivered using synchronous online sessions, brainstorming sessions and group activities, twice a week. Each session will be of 60-90 minutes duration. The course will be delivered in about 35 hours of online sessions.
- Weekly assessment, quiz, photovoice, virtual visits etc. will be part of the delivery.
- The course will include online exhibitions, hackathon, interaction with the practitioners and start-ups to enable the participants to exchange ideas, understand issues, strategies, and municipal solid waste management approaches.
- Mentorship support from city leaders and experts
- Exposure to national and international good practices

II. Project **2 weeks**

To become an expert MSWM professional, one needs to practice and experience. The capstone project will give participants an opportunity to apply the knowledge and skills in circular economy and IMSWM that one has gained throughout the course. The final project will test participants skills in application of the knowledge. Participants will prepare an action plan on any aspect of Solid Waste Management. Mentorship will be provided to participants to hone their skills.

6 How are Participants evaluated?

The participants performance will be assessed based on their involvement during the online sessions, weekly assessments, group activities, project etc.

7 Who would deliver the course?

Experts as resource persons and eminent national and international solid waste management practicing managers would share the concepts and experiences during the programme. They will also extend mentorship support for effective learning.

8 Who should enroll for the course?

- Consulting engineers, urban planners and environmental and social science graduates
- Municipal officials and sanitation officers responsible for Municipal solid waste management from public health and engineering departments
- Municipal solid waste value chain support professionals
- NGOs and startups working in solid waste management
- Working professionals & consultants involved in implementing programs under SBM

9 Who will issue the Certificate?

ASCI will issue a certificate on successful fulfillment of course requirements.

10 Programme Fee:

INR 43,200 + taxes for Indian participants (US \$ 600 for International participants)

The fee is inclusive of course material, access to learning management system and knowledge portal of ASCI, and mentorship support for capstone project.

Bank details are given below:

For Indian Students		For Foreign Participants	
Bank Account Number	62090698675	Bank Account Number	62090698960
Beneficiary Name	Administrative Staff College of India	Beneficiary Name	Administrative Staff College of India
IFSC Code	SBIN0020063	Swift Code	SBININBBH04
Bank Name	State Bank of India	Bank Name	State Bank of India
Branch Address	Bella vista Branch, Raj Bhavan Road, Somajiguda, Hyderabad - 500 082	Branch Address	Bella vista Branch, Raj Bhavan Road, Somajiguda, Hyderabad - 500 082

Last date for Nomination

Last date for receiving nominations is **October 30, 2024**. Kindly forward the nomination form and details of Bank transfer of fee payment indicating the name of the programme to **Mr. G Sreenivasa Reddy**, Programme Officer at poffice@asci.org.in

Last date for withdrawal

November 4, 2024. Any withdrawals after this date will entail forfeiture of fee paid, if any.



About ASCI

Administrative Staff College of India (ASCI) is a leading policy think tank and a premier institution providing training, research and consultancy services. Its capacity building, research and consultancy operations cover diverse disciplines. ASCI has established a strong presence in the areas of Urban governance, WASH, Environment and Infrastructure Development. It is recognized as the Center of Excellence in WASH. It provides research and advisory services to state and city governments in the areas of sanitation, solid waste management, 24X7 water supply, smart cities and ICT enablement, service level benchmarking, and urban infrastructure. ASCI incubates innovations in waste management through its WASH Innovation Hub (www.washinnovationhub.in).

Course Directors

Prof V. Srinivas Chary

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ADMINISTRATIVE STAFF COLLEGE OF INDIA
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Nomination Form

**Online Professional Certification Course on
 Integrated Municipal Solid Waste Management**

05 November 2024 – 31 January 2025

Nominee’s Contact Information:

Name (Mr/Ms) :	_____	Date of Birth :	_____
Designation :	_____	Qualification :	_____
Organisation :	_____		
Address :	_____		
Phone(s) :	(Off) : _____	(Mobile) :	_____
		Home :	_____
e-mail :	_____	Fax :	_____

Sponsor’s Details:

Name of the Sponsoring Authority _____	Designation _____
Organisation :	_____
GSTIN No. :	_____
Address :	_____

	Pincode : _____
Phone(s) :	(Off) : _____
	(Mobile) : _____
e-mail :	_____
	Fax : _____

Fee Particulars:

Amount Payable :	_____	Mode of Payment (DD/Chq/NEFT) :	_____
Name of the Bank :	_____	Date of Instrument/Transfer :	_____
Instrument Number :	_____	UTR Number for NEFT :	_____

Signature and Official Seal of the Sponsoring Authority:

NOTE: Forward nomination form to: **Mr. G. Sreenivasa Reddy, Programmes Officer**, Administrative Staff College of India, Bella Vista, Hyderabad-500 082. Phone: 0091-40-66534247, 66533000, Mobile: 9246203535, Fax: 0091-40-66534356, e-mail: poffice@asci.org.in