

List of Courses for Master of Science (MSc) in Sanitation and Post Graduate Diploma (PGD) in Sanitation

SN	Course Code	Course Title	Credit Hour
1.	San 6000	Thesis (MSc in Sanitation)	18.00
		Project (MSc in Sanitation)	9.00
		Project (PGD in Sanitation)	3.00
2.	San 6101	Sanitation Systems and Public Health	3.00
3.	San 6103	Analysis of Sanitation Flow	3.00
4.	San 6105	Sanitation Technology	3.00
5.	San 6107	Institutional Aspects of Sanitation	3.00
6.	San 6109	Emergency Sanitation	3.00
7.	San 6111	Sanitation Financing and Project Management	3.00
8.	DM 6107*	Research Methodology	3.00
9.	DM 6411*	Environmental Impact Assessment	3.00
10.	DM 6503*	Geospatial Applications in Disaster Risk Reduction	3.00

* Existing approved courses

Syllabus for Master of Science (MSc) in Sanitation and Post Graduate Diploma (PGD) in Sanitation

San 6101: Sanitation Systems and Public Health

Sanitation Systems: Introduction to sanitation, Sanitation in Bangladesh. Urban sanitation services, SDG goals; Compendium of sanitation technologies; Success and failure in urban sanitation; Diagnostics tools; Stakeholder analysis; Sanitation planning.

Public Health: Introduction to public health; Human health hazards related to human excreta; Review and assessment of transmission routes; Biological characteristics and lifecycles of sanitation-relevant pathogens; Non-infectious public health issues related to sanitation; Control measures risk evaluation tools.

San 6103: Analysis of Sanitation Flow

Classification of waste types; Sanitation streams and typical characteristics; Review of potential pollution and health issues associated with sanitation streams; Introduction to sanitation streams as a raw material; Laboratory induction; Analysis of sanitation streams-parameters including chemical, physical and biological parameters.

San 6105: Sanitation Technology

Urban drainage and sewerage; Carbon, nitrogen and phosphorus removal & recovery; sludge treatment; Onsite sanitation, collection and transport; Faecal sludge treatment technologies; Innovation processes; Technology integrating group work; Slum drainage; Relevant literature on ISO standards.

San 6107: Institutional Aspects of Sanitation

Sanitation Governance: Definitions, debates, controversies; The different actors and decision making processes; Power relations among actors in the local and global levels: Gender, class & race relations and power asymmetries; Practices of coordination & decision making around contested water distribution; Contextualizing sanitation: the politics of urban waste; Formal and informal regulation, regulatory impact assessment; Case studies on regulatory frameworks around the world; Everyday sanitation from different perspectives; Sanitation history; Sanitation in colonial contexts; Shifting sanitation governance in light of justice concerns; Governance alternatives amongst the “crisis of imagination”.

Behaviour Change: Introduction to behaviour change; Behaviour change frameworks; Intervention design; Case studies.

Advocacy and Leadership: Concepts of Leadership; Vision and Strategy; Communication skills; Self-reflection and way forward.

San 6109: Emergency Sanitation

Humanitarian action, Principles and dilemmas; Key actors and legal framework; SPERE Handbook and WASH Cluster; Monitoring and evaluation, needs assessment; Sanitation related diseases; Excreta management; Solid waste management; Development of a sanitation plan in emergency situation.

San 6111: Sanitation Financing and Project Management

Sanitation Financing: Sanitation financing options; Business models and PPP in sanitation; Financial viability; Modalities and challenges in sanitation financing; Sanitation plan; Service and value chain; Business models; Financial flow; Business canvas.

Project Management: Introduction to project management and planning; Key elements of project planning; Results based project management/ Theory of change; Stakeholder engagement; Project implementation planning; Monitoring, Evaluation and learning (MEL); Project planning software/ MS Project