Nazmun Nahar, PhD., SFHEA, FIEB (*#F11112*)
Plot 15, Block B, Bashundhara R/A
North South University, Dhaka, Bangladesh
TEL: +88-02-55668200 (Ext. 6440); Cell no: +88-01842678926
Email: nazmun.nahar@northsouth.edu

CURRENT POSITIONS

Professor, Department of Civil and Environmental Engineering, North South University
Board Member, Board of Accreditation for Engineering and Technical Education (BAETE), Bangladesh.
Academic Auditor, Bangladesh Accreditation Council (BAC).
Academic Coordinator, International Water Association (IWA) –Bangladesh Chapter
UGC representative, Quality Assurance Committee (QAC), Independent University, Bangladesh (IUB)

Director, Institutional Quality Assurance Cell (IQAC), North South University (2016-2024)

EDUCATION

Ph.D., Civil Engineering (Hydraulics and Hydrology), Purdue University, 2003
Research Topic: "Influence of Run-on on Field-scale Surface and Subsurface Water and Contaminant Movement over Spatially Variable Hillslopes"
Major Professor: Dr. R.S. Govindaraju

MS, Civil Engineering (Hydraulics and Hydrology), Purdue University, 1998
Research Topic: "Influence of First Order Degradation on Spatial Moments of the Convection-Dispersion Equation with Kinetic Sorption"
Major Professor: Dr. R.S. Govindaraju

B.Sc., Civil Engineering, Bangladesh University of Engineering and Technology (BUET), 1995

EMPLOYMENT BACKGROUND

FROM: September 2018 – To date
POSITION: **Professor,** Department of Civil and Environmental Engineering, North South University (NSU), Dhaka, Bangladesh

FROM: January 2016 – October 2024
POSITION: **Director**, Institutional Quality Assurance Cell (IQAC), North South University (NSU), Dhaka, Bangladesh

FROM: September 2013 – August 2018
POSITION: **Associate Professor,** Department of Civil and Environmental Engineering, North South University (NSU), Dhaka, Bangladesh

FROM: November 2012 – August 2013
POSITION: **Assistant Professor,** Department of Civil Engineering, University of Asia Pacific, Dhaka, Bangladesh

FROM: August 2011 – May 2012
POSITION: **Faculty,** British Columbia Institute of Technology (BCIT), Burnaby, BC, Canada

FROM: August 2008 – April 2011
POSITION: **Water Resources Engineer,** Urban Systems Ltd., Richmond, BC, Canada

FROM: October 2005 – July 2008
POSITION: **Water Resources Engineer,** Associated Engineering Ltd., Burnaby, BC, Canada

FROM: September 2003-September 2005
Worked as Independent Researcher and published 2 papers during this period.

FROM: January 1997 – August 2003
POSITION: **Research/Teaching Assistant,** Purdue University, Indiana, USA

TEACHING RESPONSIBILITIES
09/2013 to to-date
Courses taught:

- CEE 110: Computer Aided Drawing
- CEE 100: Introduction to Civil and Environmental Engineering
- CEE 211: Fluid Mechanics
- CEE 211L: Fluid Mechanics Laboratory
- CEE 260: Hydrology
- CEE 360: Open Channel Flow
- CEE 360L: Design lab for Open Channel flow
- CEE 460: Groundwater Hydraulics
- CEE 467: Irrigation and Drainage Engineering
- CEE 499: Capstone Design project supervision

Peer Reviewed Articles

1. Sowmik Das, Sowmya., Mahmudul, Hasan., & **N, Nahar**., (2025). Comprehensive review on fog collectors for drinking water supply in remote areas. Water Sci Technol 15 August 2025; 92 (4): 635–651. doi: https://doi.org/10.2166/wst.2025.120
2. Haque, E S, **Nahar, N**., Chowdhury, N. N., Gazi-Khan, L., Sayanno, T.K., Muktadir, M.A., Haque, M.S., (2025). Identification of Recycling Potential of Construction and Demolition Waste: Challenges and Opportunities in the Greater Dhaka Area. Environmental Monitoring and Assessment.
3. Siddiqui, **N., Nahar,** N., Hossain, M. S., Tazmeen, A., & Ali, K.S. (2024). Context-specific adaptation of a student engagement measure: a case study of a private university in Bangladesh. Cogent Education, 11(1). https://doi.org/10.1080/2331186X.2024.2380638
4. **Nazmun Nahar**., Md. Sazzadul Haque., and Shama E Haque. (2024). Groundwater conservation, and recycling and reuse of textile wastewater in a denim industry of Bangladesh. Water Resources and Industry. https://doi.org/10.1016/j.wri.2024.100249
5. Haque, S.E., **Nahar, N.** & Haque, M.S. (2024). A study on the waste generation rates and recycling potential for the construction and demolition waste in Dhaka, Bangladesh. Environmental Monitoring and Assessment 196, 183. https://doi.org/10.1007/s10661-024-12329-3

6. Haque, S.E., **Nahar, N**., Chowdhury, N.N. Sayanno, T.K., Haque, M.S. (2024). Geomorphological changes of river Surma due to climate change. International Journal of Energy and Water Resources. https://doi.org/10.1007/s42108-023-00275-8
7. Haque, S.E., **Nahar, N.** (2023). Bangladesh: Climate Change Issues, Mitigation and Adaptation in the Water Sector, ACS ES&T Water. https://doi.org/10.1021/acsestwater.2c00450
8. Haque, S.E., Shahriar, M.M., **Nahar, N.,** Haque, M.S. (2022). Impact of Brick Kiln Emissions on Soil Quality: A Case Study of Ashulia Brick Kiln Cluster, Bangladesh. Environmental Challenges, 2022. https://doi.org/10.1016/j.envc.2022.100640
9. Md. Sazzadul Haque, **Nazmun Nahar***, Sayed Md. Sayem (2021). Industrial Water Management and Sustainability: Development of SIWP Tool for Textile Industries of Bangladesh"; 'Water Resources and Industry' (25). https://doi.org/10.1016/j.wri.2021.100145
10. Shama E. Haque*, **Nazmun Nahar**, Sadia Chowdhury, Ali S. Sakib, Ahsan Saif (2020). Impacts of Partial Relocation of Hazaribagh Tannery on the Environment and Human Health: Focus on Children and Vulnerable Population". International Journal of Students' Research in Technology & Management Vol 8, No 1, 2020 (eISSN: 2321-2543). https://doi.org/10.18510/ijsrtm.2020.841
11. **N. Nahar**, R.S. Govindaraju, C. Corradini and R. Morbidelli (2008). A Numerical Evaluation of the Role of Run-on on Sediment Transport over Heterogenous Hillslopes. Journal of Hydrologic Engineering, Vol. 13(4), pp 215-225.
12. **N. Nahar**, R.S. Govindaraju, C. Corradini and R. Morbidelli (2003). Role of Run-on for Describing Field-Scale Infiltration and Overland Flow Over Spatially Variable Soils. Journal of Hydrology, Vol 286/1-4 pp 36-51.

Book Chapter

1. Haque, S.E., **Nahar, N.** (2021). The Partial Relocation of Hazaribagh Leather Processing Industries – A Critical Overview of Recent Environmental and Public Health Concerns. Disaster, Environment and Health. Published by the Institute of Disaster Management and Vulnerable Studies, University of Dhaka.

2. Govindaraju, R.S., **N. Nahar**, C. Corradini, and R. Morbidelli (2005). Infiltration and Run-on under Spatially Variable Hydrologic Properties," in Handbook of Groundwater Engineering, ed. J.W. Delleur.

International Conference Proceedings

1. Khan, M.A.H., Atik, A.B., Islam, A., Sajed, F.A., Shupti, I.F., Haque, S.M., Basher, S.B., Haque, S.E., Nahar, N. (2025) 'Towards sustainable water practices in Bangladesh's textile industry: evaluating MBR implementation', Proceedings of the 8th IEOM Bangladesh Conference, 20–21 December, World University of Bangladesh (WUB), Dhaka, Bangladesh.
2. Rashid, H., Gazi-Khan, L., Rafi, T.R., Razin, M.M., Nahar, N., Haque, S.E. (2024). Engineering and Eco-Friendly Solution: Gabion Wall Design for Landslide Prevention in Kutupalong Refugee Camp. 12-14 December 2024 ICACE2024, CUET, Chattogram.
3. Gazi-Khan, L., Haque, M.S., **Nahar, N.,** Haque, S.E. (2023). Wastewater Recycling of a Bangladeshi Denim Factory: A Case Study. Paper ID: 001 WasteSafe, 8th International Conference on Integrated Solid Waste & Faecal Sludge Management. Khulna University of Engineering & Technology, Bangladesh; Bauhaus University Weimar, Germany; University of Padova, Italy; International Waste Working Group.

4. **N. Nahar**, N. Siddiqui, S. Hossain, A. Tazmeen, K. S. Ali. (2022). Path to Outcome Based Higher Education in Bangladesh: An Analysis of Student Engagement and Sociodemographic factors, EDUCON 2022- IEEE Global Engineering Education Conference, March 29-31, 2022.
5. Nayeem, S.U., Rashid, H., Habib, M.S., Haque, S.E., **Nahar, N.** (2022). Identification of construction and demolition waste generation rates and recycling and reuse potential: A case of Dhaka City. Paper ID: 1279, International Conference on Advances in Civil Engineering 2022.
6. Haque, S.E., Shahriar, M.M., **Nahar, N.,** Sakib, A.S., Saif, A., Gomes, A.S., Hasan, A.S., Nezum, S.T., Mahmud, M.H., Ray, T.K., Rashid, H. (2022). Impact of Ashulia brick kilns' emissions on heavy metals concentrations (cadmium, chromium and nickle) in the neighboring soil environment. Proceedings of International Conference on Research & Innovation in Civil Engineering. Paper ID 82. South University, Chittagong, Bangladesh.
7. **N. Nahar**, R.S. Govindaraju, C. Corradini and R. Morbidelli. (2007). Run-on and Sediment Transport over Hetergeneous Hillslopes, 32nd IAHR Congress, Venice, Italy, 1-6 July 2007.
8. **N. Nahar** and R.S.Govindaraju. (2004). Quantifying the Influence of Spatial Variability on the Run-On Process: A Numerical Study," World Water and Environmental Resources Congress, Salt Lake City, Utah, 27 June–1 July 1, 2004.
9. **N. Nahar** and R.S.Govindaraju. (2003). Solute Transport by Surface and Subsurface Water with Run-on on Spatially Variable Hillslopes," ICHWAM-2002 Conference by J.N.T.University, Hyderabad, India, 18-20 December 2003.
10. **N. Nahar** and R.S.Govindaraju. (2002). Surface Runoff and Infiltration with Run-on on Spatially Variable Hillslopes, Proceedings of the Second Federal Interagency Hydrologic Modeling Conference held in Las Vegas, Nevada, USA, 28 July-1 August 2002.
11. **N. Nahar**, R.S. Govindaraju. (1999). Influence of First-Order Degradation on Spatial Moments of the PNE/CNE Model, American Society of Civil Engineers (ASCE) International Water Resources Engineering Conference in Seattle, Washington, 8-11 August 1999.

Presentations and Abstracts

1. Khan, M.A.H., Atik, A.B., Islam, A., Sajed, F.A., Shupti, I.F., Haque, S.M., Basher, S.B., Haque, S.E., **Nahar, N.** (2025) 'Towards sustainable water practices in Bangladesh's textile industry: evaluating MBR implementation', Proceedings of the 8th IEOM Bangladesh Conference, 20–21 December, World University of Bangladesh (WUB), Dhaka, Bangladesh.
2. Chowdhury, N.N., Jami, A.M., Sayanno, T.K., Asif, M.M., Haque, S.E., Nahar, N., Shupti, I. F., Khan, A.H. (2025). Resilient multipurpose cyclone shelters in Cox's Bazar in the face of severe cyclonic storms. ICETSD 2025 – International Conference Emerging Technologies for Sustainable Development, Jessore, 22-23 February 2025, p 102.
3. Chowdhury, N.N., Jami, A.M., Sayanno, T.K., Asif, M.M., Haque, S.E., Nahar, N., Shupti, I. F., Khan, A.H. (2025). Understanding the influence of Socio-Economic Factors on Household Waste Management in Dhaka City. ICETSD 2025 – International Conference Emerging Technologies for Sustainable Development, Jessore, 22-23 February 2025, p 103.
4. Rashid, H., Gazi-Khan, L., Rafi, T.R., Razin, M.M., **Nahar, N.,** Haque, S.E. (2024). Engineering and Eco-Friendly Solution: Gabion Wall Design for Landslide Prevention in Kutupalong Refugee Camp. 12-14 December 2024 ICACE2024, CUET, Chattogram.

5. Gazi-Khan, L., Haque, M.S., **Nahar, N.,** Haque, S.E. (2023). Wastewater Recycling of a Bangladeshi Denim Factory: A Case Study. 8th International Conference on Integrated Solid Waste & Faecal Sludge Management, 25-26 February 2023, Khulna University of Engineering & Technology, Bangladesh.
6. Chowdhury, N.N., Sayanno, T.K., Das, A.R., Ahmed, T., Saad, H.M., Haque, S.E., **Nahar, N.** (2023). Climate Change Induced Flood Disasters in Sunamganj. 16th UIU-International Conference on Sustainable Development, Bangladesh.
7. Rafiq, M.S., Mahmod, A., Mim, F.A., Zayan, M.M. Ahmad, M.F., **Nahar, N.,** Haque, S.E. (2023). Assessment of Different Rainwater Management Approaches for a Textile Industry Located in Narayanganj, Bangladesh. 16th UIU-International Conference on Sustainable Development, Bangladesh.
8. Habib, T., Rashid, H., Haque, S.E., **Nahar, N.,** Haque, M.S. (2023). Ecological Footprint of the Textile Sector of Bangladesh. 16th UIU-International Conference on Sustainable Development, Bangladesh.
9. Gazi-Khan, L., As-salek, M.Z.A., Wriddhi, S.S.,Haque, S.E., **Nahar, N.** (2023). "Household Waste Separation and Public Attitude: A Case Study of Dhaka City. 9th Asian Undergraduate Research Symposium (AURS9). The International Academic Forum (IAFOR), Singapore.
10. N. Siddiqui, **N. Nahar**, S. Hossain, A. Tazmeen. (2022). An SDG Agenda: How to motivate Engineering Teachers and Students for Research", Regional Conference in Civil Engineering & Sustainable Development Goals in Higher Education Institutions 2021 (RCCE & SDGs 2021), Universiti Teknologi Malaysia (UTM), January 22-23, 2022.
11. Nayeem, S.U., Rashid, H., Habib, T., Haque, M.S., Haque, S.E., **Nahar, N.** (2022). Identification of construction and demolition waste generation rates and recycling and reuse potential: A case of Dhaka City. 6th International Conference on Advances in Civil Engineering 2022 (ICACE 2022), 21-23 December 2022, CUET, Chittagong.
12. Habib, T., Rashid, H., Nayeem, S.U., Haque, S.E., **Nahar, N.** (2022). The Linkage between Improper Construction and Demolition Waste Management and Surface Water Pollution: A Case Study of Dhaka City, Bangladesh. 2022 WEST Conference: Resiliency in Every Drop. Vancouver, BC, Canada.
13. Rafiq, M.S., Mahmood, A., Zayan, M.M., Mim, F.A., Ahmad, F., **Nahar, N**., Haque, S.E.(2022). Assessment of Different Rainwater Management Approaches for a Textile Industry Located in Narayanganj, Bangladesh. 2022 WEST Conference: Resiliency in Every Drop. Vancouver, BC, Canada.
14. Haque, S.E., Shahriar, M.M., **Nahar, N**., Sakib, A.S., Saif, A., Gomes, A.S., Hasan, S., Nezum, S.T., Mahmud, M.H., Ray, T.K., Rashid, H. (2022). Impact of Ashulia brick kiln's emissions on heavy metal concentrations (cadmium, chromium and nickel) in the neighboring soil environment. ICRICE Conference Proceedings, Southern University Bangladesh, Chattogram, Bangladesh.
15. I. Hossain, **N. Nahar**and S.K. Rumpa (2021). Green Roof Systems' for Dhaka: Collaboration between Academia and Practice to Promote Green Infrastructure Policies, Regional Conference in Civil Engineering and Sustainable Development Goals in Higher Education Institutions 2020, Putrajaya, 23 -25 January 2021.
16. Gomes, A.L., Saif, A., Hasan, S., Haque, S.E., **Nahar, N.** (2021). Impact of Covid-19 Pandemic on Waste Management: A Case Study of Dhaka City in Bangladesh. The 6th Asian Undergraduate Research Symposium, The International Academic Forum, Tokyo, Japan.

17. Dey,T., Nahar, N. (2021). Using Recycled Ablution Water as Supplementary Storage for Firefighting in Dhaka City, 5th International Conference on Advances in Civil Engineering (ICACE), Chittagong University of Engineering and Technology (CUET), Bangladesh, March 4-6, 2021.
18. Islam,S.M., Uddin, M.W., Nahar, N. (2021). Comparative Assessment of Rainwater Management Measures for Large Urban Establishments, 5th International Conference on Advances in Civil Engineering (ICACE), Chittagong University of Engineering and Technology (CUET), Bangladesh, March 4-6, 2021.
19. Haque, S.E., **Nahar, N.** Chowdhury, S., Sakib A.S., Saif, A., Hasan, S. Gomes, A.S., Nezum, S.T. (2021). Evaluation of the effect of partial relocation of Hazaribagh leather industry: focus on the surrounding environment and public health. ICWFM-2021Conference, Dhaka, Bangladesh.
20. I.Hossain, **N.Nahar**, M.Kamal, S.M.Muhtashim. (2021). Innovative Green Roof Design for Existing Rooftops of Dhaka City to Mitigate the Ongoing Environmental Degradation, International Conference on Science and Technology for Celebrating the Birth Centenary of Bangabandhu (ICSTB-2021), March 11-13, 2021.
21. **Nazmun Nahar**, Mohammad Shahadet Hossain, Tania Rahman. (2021). The COVID-19 Crisis Adaptation in Higher Education Model for institutional resilience in higher education in Bangladesh, Society of Transnational Academic Researchers (STAR) 2021 Global Conference, O.P. Gindal Global University, 10 December,2021.
22. Haque, S.E., **Nahar, N.,** Gomes A.S., Hasan S., Saif, A., Sakib, A.S., Nezum, S.T. (2019). The Impacts of Partial Relocation of Hazaribagh Leather Processing Industries on the Environment and Human Health: Focus on Children and Vulnerable Population. 2019 International Symposium on Environment, Disaster and Health, 'Health at Risk in the World of Degraded Environment and Disaster.' The Institute of Disaster Management and Vulnerability Studies, University of Dhaka, Bangladesh.
23. **Nahar, N.,** Haque, S.E., Hossain, M.O., Aktar, F. (2019). Assessment of Water Supply and Sanitation Condition of Uttara Lake Slum of Dhaka City. 2019 International Symposium on Environment, Disaster and Health, 'Health at Risk in the World of Degraded Environment and Disaster.' The Institute of Disaster Management and Vulnerability Studies, University of Dhaka, Bangladesh.
24. Hossain, S. , **Nahar, N.,** and Tazmeen, A. (2019). Assessment of Existing Teaching Evaluation Process in a Higher Education Institute of Bangladesh, Conference In Pursuit of Quality in Higher Education: Challenges Ahead , University of Liberal Arts, Bangladesh ,August 22-23, 2019.
25. **Nahar, N**., Hossain, S. and Tazmeen, A. (2018). Establishment of an Effective Institutional Quality Assurance Cell in a Higher Education Institution of Bangladesh: Case Study North South University", International Conference on Quality Assurance in Higher Education 2018 (ICQAHE 2018), February, 2018.

Funded Research Projects

1) **2019-2021** - "Assessment of Impact of Ashulia Brick Kilns' Emission on the Neighbouring Environment's Soil Quality." - Co-PI, collaborative research with Dr. Shama E Haque, Associate Professor, Department of Civil and Environmental Engineering, North South University.(**Research fund 5 lacs BDT by NSU**)
2) **2020-2021** - "Understanding Student engagement at North South University: A mixed methods study for student centered, inclusive and quality learning in higher education" – PI, collaborative research with Dr. Nazlee Siddiquey (Assoc. Professor, Management), Dr.

Muhammed Sahadet Hossain (Assoc. Professor, Mathematics and Physics), Dr. Ahmed Tazmeen (Asst. Professor, Economics), North South University. (**Research fund 3 lacs BDT by NSU**)

3) **2021-2022** - "Water Management in Textile Industries of Bangladesh: Reuse and Recycle", PI, collaborative research with Dr. Shama E Haque, Associate Professor, Department of Civil and Environmental Engineering, North South University. (**Research fund 5 lacs BDT by NSU)**
4) **2021-2022** - " Recycling Potential of Construction and Demolition Waste: Challenges and Opportunities in Dhaka City", Co- PI, collaborative research with Dr. Shama E Haque, Associate Professor, Department of Civil and Environmental Engineering, North South University. **(Research fund 4 lacs bdt by NSU)**
5) **2023-2024** - " Investigating the household waste management chain from source (generation) to end (disposal): Case Study Dhaka City ", PI, collaborative research with Dr. Shama E Haque, Associate Professor, Department of Civil and Environmental Engineering, North South University. (**Research fund 5 lacs bdt by NSU**)
6) **2023-2024** - " Evaluating the Present Condition of Multi-Purpose Cyclone Shelters and Their Limitations in Cox's Bazar, Bangladesh, for Improving Community Resilience", Co-PI, collaborative research with Dr. Shama E Haque, Associate Professor, Department of Civil and Environmental Engineering, North South University. (**Research fund 5 lacs bdt by NSU**)

Important training/workshop on Higher Education and Quality Assurance attended as participant (2016-2024)

QA Areas	Organized by	Year & Duration
Workshop on Academic Leadership	UGC	2025
Registered Scrum Master Training	Agile Education, powered by scrum inc.	15 August, 2023 (22 hours)
Workshop on Teaching Excellence Programme (TEP)	British Council, UGC and Advance HE	Dec'22 to March'23 (11 days)
IQAC Director attended International symposium on: Quality assurance in engineering education through accreditation-3	BAETE	11-12 May, 2023 (Day long)
International Symposium on Higher Education 2022: The future of the University: Challenges & Opportunities	IQAC, NSU	30 November & 01 December 2022
Webinar On: Take away from the pandemic and adjusting to the New Normal	IQAC, NSU	02 April 2022
2nd Virtual Agile in Education Conference (Theme: Transforming Education through Innovative Solutions)	Agile USA	18-20 March 2021 (3 day-long)
Training workshop on External quality assessment process	BAU, UGC	03 March, 2020

Seminar on My teaching philosophy	IQAC, NSU	27 February, 2020 (Day long)
Workshop on: Status of the IQACs in private universities: ways to step forward	HEQEP, UGC	28 January, 2020 (Day long)
Capacity Building workshop on development of National Qualification Framework (NQF)	Skills 21 project	09 May, 2019 (Day long)
Workshop on Achievements of HEQEP	HEQEP, UGC	26 December, 2018 (Day long)
Higher Education Acceleration & Transformation (HEAT)Project (2019-2024) Stakeholders consultation on Quality Assurance and Accreditation	UGC& World Bank	18 November 2018 (Day long)
Workshop on: The National Qualifications Framework of Bangladesh	UGC	20 September, 2018 (Day long)
Workshop on: Project Completion Report (PCR)	HEQEP, UGC	02 July, 2018 (Day long)
Core Team Training	QAU, UGC	13 to 16 March, 2017 (4 -day long)
World Bank 15th Implementation Support Mission Meeting on QA mechanism	HEQEP, UGC	28 February, 2017
National Workshop on Curriculum Format	UGC	05 February, 2017 (Day long)
National Workshop on Curriculum Format	UGC	17 May, 2017 (Day long)
Meeting on Sharing Experiences about IQAC activities	QAU, HEQEP, UGC	03 August, 2016 (half day long)

Important training/workshop on Teaching, Learning and Quality Assurance conducted as Resource person (2017-2024)

QA Areas	Organized by	Year & Duration
Local Facilitator in British Council TEP	British Council, UGC and Advance HE	10th Feb'25 to 19th Feb'25
Teaching Learning Strategies, Constructive Alignment of Student Learning within OBE framework	East West University (EWU)	14 November, 2024
Faculty training on: "Enhancing student engagement using technology"	IQAC, NSU	7 November, 2024
Faculty training on: "Student Assessment	IQAC, NSU	17 October, 2024

Faculty Orientation and Development workshop Summer 2024	IQAC, NSU	4, 7 & 8 July, 2024
Faculty Orientation and Development Workshop Spring 2024	IQAC, NSU	29-31 January, 2024 (Day long)
Training on: 'Outcome-based Education & its Implementation in Architectural Education"	IQAC, NSU	14 June, 2023 (Day long)
Facilitator in British Council TEP (Teaching Excellence Program)	British Council, UGC and Advance HE (UK)	Dec'23 to March'24
Workshop on: "Assessment of Learning Outcomes for MIB Curriculum"	Dept. of MIB, NSU	23 May, 2023 (Day long)
Workshop on Quality Assurance in Higher Education at Bangladesh Accreditation Council	BAC	12 March, 2023 (Day long)
Online Workshop on OBE Curriculum Update	SUST	08 January, 2023 (Day long)
Faculty orientation and development workshop spring 2023	IQAC, NSU	9, 16 & 23 February 2023 (3 Day-long)
Faculty training on Investigating complex engineering problems	IQAC, NSU	27 October 2022 (Day long)
Faculty training on: Course Outline preparation following OBE Method	IQAC, NSU	13 October 2022 (Day long)
New Faculty orientation and development workshop_summer & fall 2022	IQAC, NSU	21 & 25 September, 2022 (2 Day long)
Seminar on: 'Investigating Complex Engineering Problems and Activities in the light of Outcome Based Education (OBE)	United International University (UIU)	29 August 2022 (2 Day long)
New Faculty Orientation and Development Workshop Spring 2022	IQAC, NSU	3 & 5 March 2022
Professional Development Course organized by BAC	BAC	18 January 2022
Webinar on Higher Education responses, challenges and solutions during COVID-19	Independent University (IUB)	05 October, 2020 (Day long)
Webinar on: The Role of IQAC to Ensure Quality in Online Higher Education	UGC	03 September, 2020 (Day long)
Introduction to OBE and Course Outline in Faculty Orientation and Development Workshop	IQAC, NSU	2017 – 2020 (Spring, summer & Fall semester)

Webinar on Role of IQAC in ensuring quality of education in the current pandemic situation	IQAC, NSU	22 August, 2020 (Day long)
National level round table discussion on the role of Quality higher education in achieving sustainable development goal (SDG # 4) in Bangladesh	IQAC, NSU & Leadership, Excellence and Development (LEAD)	25 October, 2018 (Day long)
Workshop on Curriculum Concept, Models and Development Strategies	University of Development Alternative (UODA)	27 August, 2018 (Day long)
"Where leaders meet"- roundtable focusing on the role of Women on SDGs	Leadership, Excellence and Development (LEAD)	13 May, 2017 (Day long)
Workshop on Curriculum Concept Model	University of Information Technology and Sciences	23 November, 2017 (Day long)
Workshop on: ' BSCEE Program Assessment'	NSU, IQAC	02 April, 2017 (Day long)

CONSULTANCEY PROJECT COMPLETED
AFFILIATION: OCREEDS, DHAKA, BANGLADESH
Name of project: Landscape of WASH in IWRM in Bangladesh Year: 2018-2019 Location: Bangladesh Client: WaterAid Bangladesh Position held: IWRM and Gender Expert **Main Responsibilities:** This project has three primary goals: identify WASH related gaps in the existing IWRM policy, review the process of the local level participation in implementing these policies and recommend opportunities to include WASH in the existing IWRM policies. Major responsibilities included detailed review of existing WASH and IWRM policies in Bangladesh and provide feasible recommendations that support achievement of Sustainable Development Goal (SDG) #6.
AFFILIATION: NORTH SOUTH UNIVERSITY, DHAKA, BANGLADESH
Name of Assignment or project: Strengthening Regional Cooperation for Wildlife Protection Project (SRCWP)

Year: 2014-2015

Location: Chittagong Hill tracts, Bangladesh

Client: World Bank

Position held: Engineering Expert

Main Responsibilities: This project involved design and implementation of a spring-stream management plan for the residents of Pablakhali protected area in the Chittagong Hill tracts. The plan includes design and construction of water management measures such water retention pond, velocity reducers along the conveyance route, retention gallery, and retention wall with spillway. In 2017, a technical report titled 'Watershed Management and Biodiversity of Pablakhali Protected Area' was published featuring different aspects of this project (Chapter 5 talks about the watershed management plan).

AFFILIATION: URBAN SYSTEMS LTD., RICHMOND, BC, CANADA

Name of Assignment or project: Integrated Stormwater Management Plan for Old Logging Ditch and Burrows Ditch Watersheds

Year: 2009-2011

Location: Surrey, BC, Canada

Client: City of Surrey, BC

Position held: Water Resources Engineer

Main Responsibilities: The project involved developing an Integrated Stormwater Management Plan for Old Logging Ditch and Burrows Ditch Watersheds that includes agricultural areas in the north and residential areas in the south. The objective of the ISMP was to recommend stormwater management strategies for the upper development that also conforms to the lowland management strategy. Major responsibilities included detail hydrologic and hydraulic modelling using MIKE SHE and MIKE 11 under both present and future conditions. MIKE SHE is an integrated physically based model that simulates different physical processes i.e. infiltration, evaporation,transpiration, and runoff and integrates seamlessly with the hydraulic model in MIKE 11. Responsibilities also included cost estimates for different management strategies.

Name of Assignment or project: Stormwater Servicing Plan for City of Surrey Neighborhoods, BC

Year: 2009-2010

Location: Surrey, BC, Canada

Client: City of Surrey, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: The project involved developing stormwater servicing strategies for neighbourhoods in the City of Surrey (Newton Town Centre; Anniedale / Tynehead). Major responsibilities included hydrologic and hydraulic analysis to develop feasible and efficient servicing strategies focusing on "low impact development" and "best management practices" to reduce runoff volume and provide runoff quality benefits for receiving watercourses. Generally NCP studies involves review of background and site information; simulating runoff conditions with computer modeling; formulating and assessing with the model alternative management strategies; coordination with City staff; reporting; and participation in consultation processes.

Name of Assignment or project: Port Mann / Highway 1 Design and Build Project

Year: 2009-2011

Location: Vancouver, BC, Canada

Client: H5M Consortium, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: The Port Mann / Highway 1 Project (PMH1) upgrades the transportation corridor of Canada Highway 1 from approximately Hastings Street (Cassiar Tunnel) in Vancouver to the 200th Street Interchange in the City of Surrey, a distance of roughly 33 kilometers. In addition to constructing a new 10-lane crossing of the Fraser River, in general the highway will be expanded from 4 to 6 (or 8) lanes and interchanges along the route will be improved. The Project includes improvements to the existing drainage infrastructure within the Project corridor in order to provide a consistent level of service throughout and to avoid or mitigate negative impacts on the highway and on adjacent lands, streams and other drainage infrastructures. Major responsibilities included modelling and assessment of integrity and capacity of the existing drainage system as well as the proposed drainage system to accommodate the proposed highway expansion and reconstruction. The work also includes development of stormwater management plan for two watersheds (out of four) impacted by the change in the existing highway design.

Name of Assignment or project: Coquitlam Watershed Review, BC

Year: 2008-2009

Location: Coquitlam, BC, Canada

Client: City of Coquitlam, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: The project involved development of a comprehensive drainage plan for the Partridge, Mantle and Fulawka Creeks watersheds. The presence of multiple stakeholders, several occurrences of landslides in the Fulawka Creek and water quality in the Coquitlam River are some of the key issues to be dealt with. In consultation with the City, a phased approach was adopted that includes the 1) Scoping study, 2) Comprehensive study and preliminary design and 3) Detailed design and implementation. Phase I was completed in February 2009. Major responsibilities were to review and assess background information and site conditions, identify opportunities and constraints, formulate preliminary mitigative actions, assist with stakeholder communications, and prepare a work program for a suggested course of action. The Phase II work completed in April 2011.

Name of Assignment or project: City of Langley Integrated Stormwater Management Plan (ISMP)

Year: 2009-2010
Location: City of Langley, BC

Client: City of Langley, BC

Position held: Water Resources Engineer

Main Responsibilities: The project objective was to develop an Integrated Stormwater Management Plan that primarily included identification of habitat and environmental values, opportunities and constraints, complete assessment of aquatic health and water quality, and review of infrastructure from Asset Management and Capital Planning perspectives. Responsibilities were conducting the analytical works including evaluation of the existing and future land use scenarios and drainage condition, identification of the critical components that should be included in the ISMP, Identification of streams potentially impacted by the development, and managing project schedules and budget.

Name of Assignment or project: Country Hills Crossing Staged Master Drainage Plan,

Year: 2009
Location: Calgary, AB, Canada

Client: Melcor Developments Ltd., AB, Canada

Position held: Water Resources Engineer

Main Responsibilities: The Staged Master Drainage Plan (SMDP) was developed for the proposed Country Hills Crossing Industrial Development, which is located at the northeast industrial area of Calgary, AB. The 58.23 ha area is predominantly agricultural with the cultivated land in the upper terrace being separated from the grassland in the lower terrace by an escarpment. The Staged Master Drainage Plan includes proposed stormwater detention facilities, overland drainage routes, water quality improvement facilities, and Low Impact Developments (LID) to mitigate the impact of development on the environment.

Name of Assignment or project: Greendale Flood Study

Year: 2009-2010
Location: Chilliwack, BC, Canada

Client: City of Chilliwack, BC

Position held: Water Resources Engineer

Main Responsibilities: In January 2009, parts of the City of Chilliwack, most notably the Greendale area, experienced severe flooding due to a combination of heavy snowfall and severe rainfall. Due to the severity and atypical nature of the flood, the City wanted to investigate the event. The primary objectives of the investigation were to find out the probable factors that caused this event, the significance of the event and potential remedies to mitigate future damages. MIKE SHE and MIKE 11 were used for the hydrologic and hydraulic modelling.

Name of Assignment or project: Hyland Creek Pond 3 Feasibility Assessment

Year: 2009-2010
Location: Surrey, BC, Canada

Client: City of Surrey, BC

Position held: Water Resources Engineer

Main Responsibilities: The Hyland Creek Integrated Stormwater Management Plan (ISMP) (Urban Systems Ltd., 2007) recommended construction of three ponds to service this area (namely, the northern part of Zone 1 plus Zone 1A). The objectives of Hyland Creek Pond 3 Feasibility Assessment were to determine whether the need for two of these ponds could be eliminated by consolidating the detention storage on a single site in the Newton Town Centre area and what would be the impact of Pond 3 on the stream downstream in terms of erosion.

AFFILIATION: ASSOCIATED ENGINEERING LTD, BURNABY, BC, CANADA

Name of Assignment or project: Integrated Stormwater Management Plan for Erickson Creek

Year: 2007-2008
Location: Surrey, BC, Canada

Client: City of Surrey, BC:

Position held: Water Resources Engineer

Main Responsibilities: The project involved developing an Integrated Stormwater Management Plan for Erickson Creek watershed. This includes agricultural areas in the north and residential areas in the south. Major responsibilities included detail hydrologic and hydraulic modelling using XP-SWMM and GIS and analysis of the drainage conditions under both present and future. The objective of the ISMP was to provide stormwater management strategies for upland development that also conforms to the lowland management strategy.

Name of Assignment or project: Flood Plain Bylaw Analysis
Year: 2007-2008
Location: Kelowna, BC, Canada

Client: City of Kelowna, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: The objective of this study was to analyze the 200-year flood profile along the Mill creek and to produce a feasible floodplain map that would lead to establishment of an effective floodplain bylaw in accordance with Section 910 of the Municipal Act. The study involved complex analysis of the dependencies among Mill creek, Mission creek and Okanagan lake systems. For hydraulic analysis and flood plain delineation, HEC-RAS and GIS were used. Responsibilities included

management of the project, conduct analysis and provide direction/guidance to the modeller, liaison with client and preparation of the report.

Name of Assignment or project: Rodgers and Marr Creeks Integrated Stormwater Management Plan
Year: 2005-2006
Location: West Vancouver, BC, Canada

Client: District of West Vancouver, BC,Canada

Position held: Water Resources Engineer

Main Responsibilities: The main objective of the project was to develop an Integrated Stormwater Management plan for Rodgers and Marr Creek Watershed in West Vancouver. Major responsibilities included data analysis using GIS and detail hydrologic and hydraulic analysis integrating XP-SWMM and GIS. Prepared draft report including alternative management strategies and recommendations to reduce the impact of development on watershed health and ensure the integrity of the creeks.

Name of Assignment or project: Foreshore Improvement Plan for Bermuda International Airport
Year: 2006
Location: Bermuda, British Overseas Territory

Client: Bermuda International Airport Authority

Position held: Water Resources Engineer

Main Responsibilities: This project was intended to develop foreshore improvement plan for Bermuda International Airport. The investigation focused on two main options: grading improvements within the currently available land base including restoration of the existing foreshore retaining wall; and, foreshore infilling and erosion protection to allow relocation of existing South Perimeter Road to an alignment further setback from the runway. Responsibilities included designing shore protection structures, and preparing report.

Name of Assignment or project: Harmony Estates Lower Hyde Creek Development
Year: 2007
Location: Coquitlam, BC, Canada

Client: City of Coquitlam, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: Major responsibilities included development of conceptual design of stormwater management plan for a 45-lot subdivision. Assessed pre-and post-development conditions and recommended feasible stormwater management strategies using SWMM 5.0. Recommendation included Low Impact Development techniques with analysis being done in Water Balance Model (WBM). Responsibilities also included dealing with client, and preparing report.

Name of Assignment or project: Flood Plain Evaluation for Brooklyn Creek
Year: 2006

Location: Comox, BC, Canada

Client: Town of Comox, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: The project involved assessment of the current floodplain condition, and more specifically analysis of the elevation and capacity of the Balmoral Avenue culvert to determine the potential of failure. Also to assess the risk posed by any such failure. Responsible for hydrologic and hydraulic modelling in Visual HYDRO, report preparation including recommendations regarding specific modifications to reduce the risk of failure at the Balmoral Avenue culvert, and evaluating the effects of the Prichard Road high flow diversion. Also investigated whether this infrastructure provides a basis for reducing the Flood Control Levels and setbacks prescribed in the Town Bylaw.

Name of Assignment or project: Byrne Creek Daylighting in Ernie Winch Park

Year: 2007

Location: Burnaby, BC, Canada

Client: City of Burnaby, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: The main objective of this project was to perform feasibility assessment of Byrne Creek daylighting within Ernie Winch Park in Burnaby. Besides daylighting, other viable options such as having a detention pond or a wetland were considered. Responsibilities included completion of hydrologic and hydraulic analysis of the existing drainage system and feasibility study of daylighting Byrne Creek along with a two-stage water quality pond, management of project schedules and report preparation.

Name of Assignment or project: Watershed Yield Study

Year: 2007-2008

Location: City of Nanaimo, BC, Canada

Client: City of Nanaimo, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: This project involved watershed yield study of Nanaimo watershed. A dam and reservoir was proposed on the South Nanaimo River. The new reservoir would provide additional storage for drought periods and future demands. Major responsibilities included detailed analysis of the watershed yield using UBC Watershed Model. Using daily maximum and minimum temperatures and precipitation data, the UBC Watershed Model calculates daily watershed outflow resulting from snowmelt and rainfall. The effect of climate change on the watershed yield was also investigated as part of the assessment, using the Canadian CGCM3 climate model.

Name of Assignment or project: Willoughby Community Park Stormwater Management Plan

Year: 2006-2007
Location: Langley, BC, Canada

Client: Township of Langley, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: Developed Stormwater Management Plan for Willoughby Community Park in Township of Langley. The recommended facilities included conceptual design of two-phase detention ponds conforming to the park Master Plan, and Low Impact Developments (LID) to comply with Latimer Creek Master Drainage Plan (MDP). Responsibilities included management of the project, detail modelling and analysis using SWMM 5.0, liaison with client and preparation of final report.

Name of Assignment or project: Percy Perry Park Artificial Turf Drainage Investigation
Year: 2007
Location: Coquitlam, BC, Canada

Client: City of Coquitlam, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: This project involved investigation of the drainage problem occurring in the Percy Perry Artificial Turf Field. Ponding was observed on the field even during a typical storm event. Responsibilities included detail analysis of different drainage components of the turf field, investigation of the product test results from manufacturers and the designers, management of the project, analysis of the drainage problem, recommendation of possible solutions and report preparation.

Name of Assignment or project: Stormwater Drainage Plan for Cranbrook Airport Runway Extension
Year: 2006-2007
Location: Cranbrook, BC, Canada

Client: Cranbrook Airport Authority, BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: Designed stormwater drainage plan to maintain safe and efficient operation of the airport. Goals were to prevent flooding, maintain water quality in the receiving water bodies, protect fish habitat and mitigate potential erosion and sedimentation problems. Developed hydraulic and hydrologic model in SWMM 5.0, analyzed pre-development and future development conditions for 10-year storm event, and provided recommendations for minimizing development effects through detention ponds and grassed swales.

Name of Assignment or project: Mosaic Homes Stormwater Management Plan

Year: 2006
Location: Burnaby, BC, Canada

Client: City of Burnaby, BC, Canada

Position held: Water Resources Engineer
Main Responsibilities: Involved with development of stormwater management plan for redevelopment of a 5.59 ha site. Responsibilities included investigation of available alternatives to manage extreme event runoff. Options included detention storage at two locations within the development site, online detention storage in a nearby gulley, diversion of flows to the adjacent Byrne Creek, and over controlling upland flows to compensate for increased flows resulting from the development. Prepared draft report.

Name of Assignment or project: Guildford Detention Pond Review
Year: 2007
Location: Surrey, BC, Canada

Client: City of Surrey, BC, Canada

Position held: Water Resources Engineer
Main Responsibilities: Feasibility analysis of a community detention pond proposed at 15399 Guildford Drive in Surrey. Developed detailed hydraulic and hydrologic model based on the City's GIS database using XP-SWMM. Performed detail analysis of the existing small lot detention facilities and feasibility analysis for the proposed detention pond.

Name of Assignment or project: Hydrologic and Hydraulic Analyses of Ungauged Watersheds throughout BC
Year: 2005-2008
Location: BC, Canada

Client: Government of BC, Canada

Position held: Water Resources Engineer

Main Responsibilities: Conducted numerous hydrologic and hydraulic analyses of ungauged watersheds throughout BC for resource road development, highways and municipal clients. These assignments have provided the basis for sizing culverts and bridge spans. And included flow estimation using various methods, and frequency analyses using Consolidated Frequency Analysis (CFA) software.