**ADMINISTRATIVE FORERUNNERS**

**UNESCO - Madanjeet Singh Centre for South Asia Water Management**

Dr. R. L. H. Lalith Rajapakse  
Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka  
Chairman of the Centre, Director/UMCSAWM, Department of Civil Engineering, University of Moratuwa, Sri Lanka.

**UMCSAWM Board of Management**

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<td>President</td>
<td>Prof. K.K.C. Kapila PERERA</td>
<td>Vice-Chancellor, University of Moratuwa, Sri Lanka</td>
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<td>Vice-President</td>
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<td>Dr. R. L. H. Lalith Rajapakse</td>
<td>Chairman of the Centre/Overall Programme Director</td>
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**University of Moratuwa**

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<td>Vice Chancellor, University of Moratuwa</td>
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<td>Prof. N. K. WICKRAMARACHCHI</td>
<td>Dean, Faculty of Engineering, University of Moratuwa</td>
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SECTION — I

WELCOME TO

UMCSAWM, Sri Lanka

UMCSAWM at the Department of Civil Engineering,
University of Moratuwa, Sri Lanka

We are delighted to introduce you to the UMCSAWM, Sri Lanka and our graduate programs especially targeted for practising water professionals in the industry.

Graduate study at the UMCSAWM involves professional training programs tailored for industry needs and integrated approaches in water management research. These are characterised by an intense interest in the professional field of choice, a willingness to cross inter-disciplinary boundaries, an open spirit of enquiry, active collaboration and often with a highly specialised focus.

Since the first intake in 2013, we have developed a number of new courses that demonstrate our commitment to a deep and transformative learning experience in pursuit of professional excellence, innovation and an absorbing education in water management.

An exciting range of research activities is being undertaken by both staff and graduate students. In current research projects, our professional knowledge, skills and experience are combined with contributions from scientists and technicians from other disciplines, institutions and community organizations in Sri Lanka and overseas. Our research covers diverse areas ranging from fundamentals and general practices to advanced technical and field based experimental procedures to enhance knowledgebase of participants.
I am certainly delighted to issue this message to UMCSAWM 2020 Brochure. The UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM) established in April 2013 as a Centre of Excellence at University of Moratuwa was a resounding success to pursue the University endeavours to regional and international arena. The fulltime International Master’s Degree program in Water Resources Engineering and Management commenced in August 2013 has now come a long way and the Fifth batch of students are graduating this year.

The Hydraulic and Water Resources Engineering Group of the Department of Civil Engineering which started the first postgraduate degree programme of University of Moratuwa in 1980’s has played a leading role in establishing the Centre and its program. This program was a breakthrough effort to ensure yet another milestone of the University and it was the first of its kind in the entire higher education system of our country.

Since the inception of the Centre over the past years, the Department of Civil Engineering and its untiring staff have contributed to our nation and neighbouring nations by disseminating our strengths in water and irrigation. This indeed is another huge stride by University of Moratuwa towards the national development vision and the Centre has conducted several workshops and seminars targeting practicing engineers.

The efforts of the University to establish this Centre and its program were substantially supported by the South Asia Foundation (SAF) and the work commenced with the Late Hon. Minister Lakshman Kadiragarmar inviting our university to submit a proposal for funding. The South Asia Foundation (SAF) consented and continue to provide full scholarships to SAARC country students. UNESCO goodwill ambassador Late Shri Madanjeet Singh from his personal funds donated a new building for the regional centre to house this Master’s degree program, water management related research and training programs.

I would like to take this opportunity to thank all those who worked untiringly towards achieving this goal, those who supported with finances and goodwill. I wish the program and the UNESCO Madanjeet Singh Centre for South Asia Water Management further success in the years to come.

- Professor K. K. C. K. Perera
  Vice-Chancellor
  University of Moratuwa, Sri Lanka
WATER MANAGEMENT OPTIONS FOR SUSTAINABLE FUTURE DEVELOPMENT

DIRECTOR’S NOTE

Dr. R. L. H. L. Rajapakse
Senior Lecturer, Department of Civil Engineering,
University of Moratuwa, Sri Lanka.

Chairman of Centre
Director UMCSAWM
UNESCO Madanjeet Singh Centre for
South Asia Water Management
(UMCSAWM), University of Moratuwa
Sri Lanka.

The ever-growing challenges in water resources management in South Asia are posing tremendous pressure on engineers, hydrologists, policy planners, provincial authorities and governments to come up with sustainable, realistic solutions to serve almost 2 billion population in the region.

To address the growing global and regional challenges, the Department of Civil Engineering, University of Moratuwa inaugurated the International/Regional M.Sc./P.G Diploma programme in Water Resources Engineering and Management, mainly for practising civil engineers to update their knowledge and keep abreast with recent developments in water resources management and hydraulic engineering fields. This programme is conducted at the UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM), attached to the Department of Civil Engineering.

The UMCSAWM was established in 2013 with the support of the South Asia Foundation (SAF) to promote regional cooperation through South Asian Water Management Education. Department of Civil Engineering, in collaboration with UMCSAWM offers the MSc program with SAF-Madanjeet Singh Scholarships (funded by SAF) to students from SAARC countries. The centre celebrates its 6th anniversary while the fifth MSc batch will be graduating in 2019.

The Centre has so far hosted 35 full-time students from all SAARC countries and 56 local participants, organized 3 international workshops, and UMCSAWM Water Conference 2017, benefitting a large crowd of civil engineering practitioners and others in the water sector. The Centre is also engaged in pioneering research in areas of relevance to South Asian countries.

The inaugural Centre Chairman and Overall Program Director Prof. Sohan Wijesekera has immensely contributed to raise the recognition of UMCSAWM in water arena with his guidance focusing on exceptional accomplishments in water resources research and practice areas before passing the reins to me in March 2018. With further support extended by SAF, collaborations with numerous other forefront organizations worldwide and the proposed UNESCO Chair on South Asia Sustainable Water Resources Management, the UMCSAWM and its MSc program will be further strengthened, expanded and diversified focusing on the core thrust areas in research, knowledge sharing and capacity building.

Full time and part-time student positions are open to prospective international and local applicants who can choose options to suit their requirements and commitments. This program with a mixture of international and local postgraduate students is continuing to raise the standards of national/regional engineering higher education and water management to unprecedented heights.

- Dr. R. L. H. Lalith RAJAPAKSE
  Director UMCSAWM/Chairman of the Centre
  University of Moratuwa, Sri Lanka.
The University of Moratuwa (UoM)-Sri Lanka, located at the heart of a beautiful, vibrant and geographically well-connected city in the backdrop of a vast expanse of shimmering waters of the picturesque Bolgoda Lake, is the only technological university in the country. The university presently caters to a total undergraduate population of approximately 6000 students and about 1200 postgraduate students and prides itself in having an excellent Engineering Faculty and being the only University in Sri Lanka to have Faculties of Architecture and Information Technology.

The Faculty of Engineering is the largest faculty in the University of Moratuwa comprising 12 academic departments offering courses in 9 undergraduate engineering disciplines. The courses offered have been designed based on years of industry experience and dynamic international perspectives to ensure that the students attain internationally accredited undergraduate and postgraduate engineering qualifications with an entrepreneurial dimension, while demonstrating distinctive strengths in education and research.

The UoM is one of the highest internationally ranked universities in Sri Lanka and the undisputed leader in engineering, architectural and technological education. The vision of UoM is “to be the most globally recognised Knowledge Enterprise in Asia”.

DEPARTMENT OF CIVIL ENGINEERING

The Mission of the Department of Civil Engineering is to develop educational programmes that provide educational, research and professional experiences that enable our graduates to become leaders in their professional careers, to pursue excellence in research, and to serve the profession, community and nation, and be recognized in the international scene.

The mainstream programmes in Civil Engineering presently accommodate 500 undergraduates and over 80 postgraduate students.

The undergraduate honours degree aims at producing Civil Engineers with significant knowledge and skills in design, analysis, synthesis, application techniques and management, who can serve in the Civil Engineering profession both in Sri Lanka and abroad with confidence and distinction.

University of Moratuwa, a leading technological university in the region and its magnificent Department of Civil Engineering welcome you to partake in a truly unique experience!
UMCSAWM-SL/SAF-SL News

UMCSAWM/SAF-SL MEETING WITH FULL-TIME STUDENTS

A meeting between full time students of current batch (5th batch) and Ms. Swnitha Perera, Secretary of South Asia Foundation (SAF), Sri Lanka chapter was held at the UMCSAWM Board Room, University of Moratuwa on April 30, 2019 to review the progress of ongoing M.Sc. Program, giving an opportunity to all students to discuss about the matters related to the program and their life at UMCSAWM.

UMCSAWM/CRIP/WS ATKINS WORKSHOP ON SWAT MODELLING

Workshop on SWAT modelling was jointly organized by UMCSAWM-CRIP-Atkins on 18th January 2019 at the UMCSAWM main Lecture Theatre for all M.Sc. full-time and part-time students and selected Alumni from past intakes. The Workshop was focusing on River Basin Modelling using SWAT for Basin-wide Water Resource Management was conducted by a Guest Speaker from WS Atkins International Ltd.

UMCSAWM/DHI WORKSHOP ON HYDROLOGICAL MODELLING WITH MIKE

A joint workshop by DHI-UMCSAWM was successfully held on 7th and 8th of March 2018 at the UMCSAWM main Lecture Theatre. All M.Sc. Students and external participants from institutions of relevant fields participated for the workshop which mainly focused on flood inundation modelling and mapping and coastal zone modelling with related issues using powerful MIKE modelling software.
The sustainable development and management of limited water resources has become the key issue in all global forums. It is well known that unless global water is properly managed, the future generations would be the victims of endless water wars. Sri Lanka is endowed with a hydraulic civilization nurtured by a rich irrigation heritage. Merging this ancient wisdom and historical forms of water management with emerging new technologies will play a vital role in developing integrated approaches for sustainable and equitable water management in future.

To address these growing global and regional challenges, the Department of Civil Engineering, University of Moratuwa, Sri Lanka has timely ventured to commence an International/Regional M.Sc./P.G Diploma programme in Water Resources Engineering and Management, mainly for practicing civil engineers to update their knowledge and keep abreast with recent developments in water resources management and hydraulic engineering fields. The programme will be conducted by the newly established UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM), attached to the Department of Civil Engineering.

The UMCSAWM has been established with the support of the South Asia Foundation (SAF), with the objective of promoting regional cooperation through South Asian Water Management Education. The Department of Civil Engineering, in collaboration with UMCSAWM, intends to offer the aforementioned M. Sc./PG Dip. courses while offering fully paid Madanjeet Singh Scholarships (funded by SAF) to students from South Asia Association for Regional Cooperation (SAARC) countries. The Centre will conduct other related short courses/workshops and also engage in pioneer research in areas of relevance to South Asian countries. The full-time positions are open to prospective international students from SAARC countries and full-/part-time positions will be available to local students.
The UMCSAWM is the newest member to join the UNESCO Madanjeet Singh Institutions of Excellence and a landmark in the Sri Lankan university history as the first regional Centre established to conduct full-time postgraduate degree programmes. The new UMCSAWM Centre building has been completed with the financial assistance provided by UNESCO Ambassador Late Shri Madanjeet Singh from his personal funding on top of UoM contribution, and is at a location gracing the university adjacent to the Department of Civil Engineering. The sixth student batch is scheduled to be enrolled in February 2020 and seventh student batch is scheduled to be enrolled in May 2021.

The Department of Civil Engineering, in collaboration with UMCSAWM will offer Masters Degrees and Postgraduate Diploma Courses in Water Management arena while offering eight (08) fully paid Madanjeet Singh Scholarships to SAARC countries (funded by SAF) and will also conduct pioneer research in areas of relevance to South Asian Countries. Additional scholarships will be available to local students Sri Lankan students joining the programme on full-time.

**Programme Structure**

The UMCSAWM offers the Master of Science/ Postgraduate Diploma in Water Resources Engineering and Management (M.Sc./ P.G. Dip.) starting from 2013 onwards and the sixth intake will be enrolled in January 2020 and seventh intake will be enrolled in May 2021.

The course content has been carefully prepared to enhance the candidates’ theoretical knowledge on design and practical applications, while addressing various aspects pertaining to Water Resources Engineering and Management. Teaching and learning methods are aligned to provide an integrated and interdisciplinary approach. Programme structure brings together the scientific study of water resources with practical planning and management skills, encouraging participants to study water management from a multidisciplinary perspective and to seek integrated solutions. Effective use of Computer Software in Water Resources and Watershed Modelling, Designing of Hydraulic Structures, Geographic Information Systems (GIS) and Integrated Water Resources Management (IWRM) related aspects have also been incorporated.
All taught courses are offered during the first 12 months period, which consists of three terms. In the first two terms, three subjects are taught per term with written examinations at the end of the term. During the third term, two subjects are offered with the written examinations at the end of the term. During these three terms, students will also do the relevant design course work assignments and be continuously assessed based on assignments, reports and seminars.

Those who successfully complete all examinations and course requirements are eligible to continue for M. Sc. or to obtain P.G. Diploma. Those who register for M. Sc. need to carry out a research project in a specified area under the guidance of a supervisor(s). The research project has to be completed by the end of fourth term and on completion of it and submitted dissertation, the formal assessment of the research work will then be undertaken.

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<th>Degree</th>
<th>Minimum Duration</th>
<th>Permitted Duration</th>
<th>Maximum Duration</th>
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<td>M.Sc. (Full-Time)</td>
<td>12 Months</td>
<td>18 Months</td>
<td>36 Months</td>
</tr>
<tr>
<td>M.Sc. (Part-Time)</td>
<td>21 Months</td>
<td>36 Months</td>
<td>48 Months</td>
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<tr>
<td>P.G. Dip. (Part-Time)</td>
<td>12 Months</td>
<td>24 Months</td>
<td>48 Months</td>
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There is an ever increasing demand for water resource managers as well as hydraulic and irrigation engineers in the industry, both locally and internationally especially in the South Asian region. Since this course is designed mainly for practicing engineers to update their knowledge on water resource management and design and operation of hydraulic structures while keeping abreast with recent developments in water resource management and hydraulic engineering fields, this course will enable civil engineers to get the sound theoretical knowledge on related areas and face the challenges in the industry.

Participants will have clear understanding of integrated water resources management (IWRM) to play an essential role in government institutions and the private sector. The programme participants will be equipped with professional expertise and management skills to enable them plan, design, operate, maintain and rehabilitate water resources projects. Due to these reasons, there is a great demand for the course.
OBJECTIVES

The objectives of this course are to provide an opportunity for graduate civil engineers to enhance their professional development while gaining postgraduate academic qualifications and also to produce well qualified water resources engineers and managers and hydraulic and irrigation engineers with sound theoretical knowledge to meet the needs of the country as well as South Asian region.

ELIGIBILITY REQUIREMENTS

1.1 The eligibility requirements for the M. Sc. Degree course shall be decided by the Department subject to the minimum eligibility requirements specified in Section 1.2 and approved by the Faculty and the Senate.

1.2 An applicant fulfils the minimum eligibility requirements to follow the prescribed course leading to the Degree of Master of Science, if he/she has:

i). Either

(a) The Degree of Bachelor of Science of Engineering of the University of Moratuwa, Sri Lanka in a relevant field as judged by the Faculty and approved by the Senate with a minimum of one year relevant experience after obtaining such qualifications

or

(b) The Degree of Bachelor of Applied Science of the University of Sri Lanka, Katubedda Campus in a relevant field as judged by the Faculty and approved by the Senate with a minimum of one year relevant experience after obtaining such qualifications

or

(c) any other engineering degree in a relevant field as judged by the Faculty, and equivalent to (a) above as judged by the Faculty and approved by the Senate with a minimum of one year relevant experience after obtaining such qualifications

or

(d) at least the Associate Membership of a recognized professional engineering institute in a relevant field with a minimum of two years appropriate experience after obtaining such membership; the acceptability of the Associate Membership status of the candidate, the recognition of the institute and the relevancy of the field for this purpose shall be judged by the Faculty and approved by the Senate.

AND

ii). If English is not the medium of instruction in the First Degree of the candidate, TOEFL (a minimum of 500 points in paper-based, 173 in computer-based, or 61 in internet-based test) or IELTS (a minimum of 5.0 in Academic Version) scores or equivalent.
Each module has assignments, design and management coursework which help participating engineers to solve real life problems related to Water Resources Engineering and Management. Improvement of communication and presentation skills is also achieved through seminars, coursework assignments and oral tests. The research project is envisaged to provide a good opportunity for the candidates to develop their research skills.

The subjects offered would cover the main areas of:

- Integrated Water Resources Management
- Concepts of Irrigation and Irrigation Water Management
- Remote Sensing and Geographic Information Systems (GIS) for Planning and Management
- River and Estuary Hydraulics
- Water Resources Project Planning and Management
- Research Methods for Water Resources Engineering and Management
- Water Quality Management
- Climate change impacts and adaptation options for Water Resource Management
- Disaster Risk Assessment, Reduction and Mitigation
- Advanced GIS for Water Resources Management
- Coastal Engineering and Management
- Water Pollution Control
- Computer Applications in Irrigation and Drainage
- Groundwater Engineering and Management

The course starts in February in every other year for international and local students for M. Sc. / P.G. Diploma. The minimum duration of Master of Science course is one (01) year (12 months) on full-time basis or 21 months on part-time basis and the minimum duration of Post-graduate Diploma is one (01) year (12 months) on part-time basis. The part time option is only for local students. During the first 12 months, which is common to both groups, the students will follow a course of intensive lectures and attend seminars. Lectures and research activities for full time (international) students will be conducted from Tuesday to Saturday. The overseas students are expected to commence the research projects from the beginning of the course while the part time students have the option of late commencement. For part time (local) students, lectures will be conducted usually only on Fridays and Saturdays.
On special occasions, especially when lecturers are available from overseas, selected activities may be conducted on other days.

All taught courses are offered during the first 12-month period, which consists of three terms. In the first two terms, three subjects are taught per term with written examinations at the end of the term. During the third term, two subjects are offered with the written examinations at the end of the term. During these three terms, students will also do the relevant design course work assignments and will be continuously assessed on their assignments, reports and seminars.

Those who successfully complete all examinations are eligible to continue for M. Sc. or to obtain P.G. Diploma. Those who register for M. Sc. need to carry out a research project in a specified area under the guidance of a supervisor(s). The research project has to be completed by the end of fourth term and on completion, the results should be submitted in the form of a dissertation. On submission of the dissertation, formal assessment of the research work will be undertaken in line with the University of Moratuwa rules and regulations.

**Degree/PG Diploma Awarded**

**Name of Degree/Diploma Programme**

Master of Science/ Postgraduate Diploma in Water Resources Engineering and Management

**Full Title**

Master of Science/ Postgraduate Diploma in Water Resources Engineering and Management

**Abbreviated Title**

M. Sc. / P.G. Diploma in Water Resources Engineering and Management
The UMCSAWM conducts regular workshops targeting industry groups and practicing professionals on timely topics.

Special lectures, presentations, field visits, debates, and excursions organize to discover relationship between water and civil engineering, as well as to acquire comprehensive knowledge in hydraulic civilization in early Sri Lanka nurtured by a rich irrigation heritage.

The UMCSAWM organizes seminars to discuss common problems in water resources engineering and management related arena, coupling emerging technologies and changing practices to update knowledgebase and understanding of participants.

Field visits and Excursions are organized by UMCSAWM to enhance the practical knowledge between Civil Engineering and real scale of engineering structures.
The challenges faced by water managers across the world increasingly require leaders able to cross social, environmental and technological boundaries, to combine inter-disciplinary knowledge and to use theory to inform effective practice.

The Master of Science in Water Resources Management creates water leaders by drawing on international teaching and research from many fields to provide a transdisciplinary, whole-of-water-cycle approach.

The UMCSAWM shall have two parallel approaches to achieve its cardinal objective of regional cooperation - one through academic studies and the other through research activities. A multi-dimensional approach shall create a hub of scholars that specialize in Water Management studies in SAARC region and other countries, and at the same time promote international convergence of Water Management expertise in Engineering, Irrigation, Hydrology, GIS, and Environmental Sustainability, etc.

In addition to the teaching facilities and common spaces presently available at the Department of Civil Engineering, this new Centre building will have dedicated space for all UMSCSAWM with two lecture rooms, a computer room, staff and student rooms, areas for research, self-study room, space for individual/group work, a conference room, library space, administrative space, and other common areas. Outdoor experimental areas are also available to demonstrate practical applications in three distinct water specialties, namely, Irrigation, Urban Storm water Drainage, and Riverine and Estuarial Ecosystems. These facilities will ensure an extensive exposure and hands on research experiences at an advanced level of application to the participants of UMCSAWM programmes.
A list of recent research involvements and projects undertaken by the staff of UMCSAWM is presented as follows.

**Prof. Sohan WIJESEKERA**  
BSc Eng. (SriLanka), PG Dip Hyd Str (Moratuwa), MEng (Tokyo), DEng (Tokyo), MICE (Lond), CEng, FIE (SL)  
- Analysis of the influence of Field Level Hydraulic Property Approximations in Case of Urban Storm water Modelling  
- Analysis of Parameter Sensitivity and Sub Watershed Delineation when Flood Modelling with Spatially Distributed Unit Hydrographs  
- Analysis of the Parameters Affecting the Performance of Multiple Query Web Based Land and Water Geo-Information Systems  
- Mathematical Modelling of Watershed Wetland Crossings for Flood Mitigation and Groundwater Enhancement – Case of the Attagalagala Oya River Basin  
- Potential on the Use of GIS Watershed Modelling for River Basin Planning-Case Study of Attagalagala Oya Basin, Sri Lanka

**Mr. Harsha RATHNASOORIYA**  
B.Sc. Eng.Hons (Moratuwa), MPhil (Moratuwa)  
- Investigations on Energy Losses in Pipe Flow (UG Project)  
- Investigations on Sediment Transport and Sand Mining in Kelani River  
- Tsunami Impact Mitigation by Coastal Vegetation  
- Tsunami Inundation Modelling and Risk Assessment: Case Study in Galle

**Dr. Nimal WIJAYARATHNA**  
B.Sc. Eng.Hons (Moratuwa), MEng AIT, DEng(Yokohama), CEng, MIE (SL)  
- Impact of catchment land use changes on the Gin River  
- Consequences of Modifications Made to Natural Mouths of Madampe, Garaduwa and Nanthikadal Lagoons  
- Restoration potential of the ancient tank system in Hambanthota district  
- Metro Colombo Urban Development Project -Flood Mitigation & Drainage Management  
- Variation of constituent loads and concentrations with the flow in Gin River, Sri Lanka
RESEARCH THEMES AT UMCSAWM - SL

Dr. Lalith RAJAPKSE
B.Sc. Eng.Hons (Moratuwa), M.Sc.(Saitama), Ph.D.(Saitama), C.Eng.,MIESL
- River restoration efforts in Sri Lanka; Historical development and future directions
- Drying up of groundwater wells in the wet and dry zones of Sri Lanka and effects of aquifer characteristics and recharge patterns
- Future Water Management Issues in Greater Colombo – Sri Lanka
- Applying System Dynamics to Water Demand Forecasting in Greater Colombo Region
- Mathematical Modelling of Watershed Wetland Crossings for Flood Mitigation and Groundwater Enhancement – Case of the Attnagalu Oya River Basin

Dr. W.Buddhika GUNAWARDANA
BSc. Eng (Moratuwa), MEng Studies(Auckland)
- Water pollution and its control
- Contaminant characterization and their behavior in surface water and groundwater.
- Pesticides contaminater water and soil investigation and remediation.
- Presence and behavior of emerging contaminants (glyphosate, PAHs, antibiotics, phthalates, etc.) in the environment and their possible removal mechanisms.
- Phytoremediation of heavy metals and organics from soil and water.
- Water treatment and design of treatment facilities.
- Advanced water and waste water treatment.

Dr. P. K. C. De Silva
BSc Eng. (Hons) (Moratuwa), MSc (Moratuwa), PhD (Saitama), CEng, MIE(SL)
- Studies on flood damage mitigation and improvement of drainage system at the Thunmulla junction in Colombo, Sri Lanka.
- Studies on sedimentation on floodplains in compound channels.
- Engineering interventions for development of urban water drainage: Case study on a sub basin of Kiulapone canal, Colombo, Sri Lanka.
- Studies in structural inventions to restrict sediment deposition across Lunawa Outfall of Sri Lanka.
SECTION — IV

WHY CHOOSE

UMCSAWM - SL

UMCSAWM at the Department of Civil Engineering,
University of Moratuwa, Sri Lanka

The UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM) attached to the Department of Civil Engineering, University of Moratuwa, Sri Lanka is the newest member to join the UNESCO Madanjeet Singh Institutions of Excellence and a landmark in the Sri Lankan university history as the first international Centre established to conduct fulltime postgraduate degree programmes.

The UMCSAWM has been established with the support of the South Asia Foundation (SAF), with the objective of promoting regional cooperation through South Asian Water Management Education. The Department of Civil Engineering, in collaboration with UMCSAWM intends to offer Postgraduate Degrees and Diploma Courses in the field of Water Resources Management and Hydraulics while offering eight Madanjeet Singh Scholarships (funded by SAF) to SAARC countries. The Centre will also conduct pioneer research in areas of relevance to South Asian countries and accommodate fulltime international students from SAARC countries and full-/part-time positions will be available to local students.

The Master of Science/Postgraduate Diploma in Water Resources Engineering and Management programme offered by UMCSAWM from August 2013 has been designed to teach Water Management in the context of South Asian Region and intends to provide the participants a firm grounding in the principles, techniques, issues and practice of Water Resources Engineering and Management. This course is designed mainly for practicing civil engineers to update their knowledge and keep abreast with recent developments in water resources management and hydraulic engineering fields.

The UMCSAWM shall have two parallel approaches to achieve its cardinal objective of regional cooperation - one through academic studies and the other through research activities. A multi-dimensional approach shall create a hub of scholars that specialize in Water Management studies in SAARC region and other countries, and at the same time promote international convergence of Water Management expertise in Engineering, Irrigation, Hydrology, GIS, and Environmental Sustainability, etc.
**IT IS UMCSAWM- SL, BECAUSE ....**

### VISION OF UMCSAWM - SL

To be an internationally recognised world-class, graduate-level institution, seamlessly integrating research and education to produce future world leaders and critical thinkers in sustainable Water Resource Engineering and Management.

### MISSION OF UMCSAWM - SL

Promoting regional cooperation through South Asian Water Management Education to create to a hub of scholars that specialize in Water Management studies in SAARC and other countries, and promote international convergence of Water Management expertise in diverse fields.

### WHY UMCSAWM - SL

The University of Moratuwa has earned a reputation for providing a satisfying student experience, academically and culturally. It admits outstanding undergraduate and postgraduate students for its academic programmes. UoM offers Sri Lanka’s exclusive engineering, architectural, quantity surveying, facilities management, town and country planning, fashion design and product development and transport and logistic management degree programmes. The UoM is one of the highest internationally ranked universities in Sri Lanka and the undisputed leader in engineering, architectural and technological education.

The courses offered at the UMCSAWM, Faculty of Engineering, University of Moratuwa have been designed based on years of industry experience and dynamic international perspectives to ensure that the students attain internationally accredited undergraduate and postgraduate engineering qualifications with an entrepreneurial dimension, also demonstrating distinctive strengths in education and research.

The integrated approach to water management introduced by the UMCSAWM at the Department of Civil Engineering, UoM acknowledges the environmental, ecological and human processes that water undergoes from catchment to coast; clarifies and manages the multiple values of water; and considers the impacts of decisions systemically across environment, politics, law, science, culture, engineering, economics, health and society.
The University of Moratuwa has newly built a magnificent three-storied building adjacent to the Civil Engineering Complex to host the Centre with partial support from the generous personal contributions from SAF Founder, UNESCO Goodwill Ambassador Shri Madanjeet Singh.

In addition to the teaching facilities and common spaces presently available at the Department of Civil Engineering, this new Centre building will have dedicated space for all UM-SCSAWM with two lecture rooms, a computer room, staff and student rooms, areas for research, self-study room, space for individual/group work, a conference room, library space, administrative space, and other common areas.
**GENERAL FACILITIES & RESOURCES AT UMCSAWM - SL**

UMCSAWM Centre Building, Department of Civil Engineering  Contd.

UMCSAWM with two lecture rooms, a computer room, staff and student rooms, areas for research, self-study room, space for individual/group work, a conference room, library space, administrative space, and other common areas.

Outdoor experimental areas are also available to demonstrate practical applications in three distinct water specialties, namely, Irrigation, Urban Storm water Drainage, and Riverine and Estuary Ecosystems.

**HYDRAULIC ENGINEERING LABORATORY**

The Hydraulic Engineering Laboratory attached to the Department of Civil Engineering is available for conducting experimental classes. The laboratory is equipped with an Open Channel-flow Tilting Flume 8 m long, 0.30 m wide and 0.40 m deep, Circular Orifice Apparatus, Pelton Wheel Turbine, Centrifugal Water Pump, Pump/Turbine Apparatus, Flow Measuring Apparatus, Pipe Friction Apparatus, Hydrostatic Pressure Apparatus, Pontoon Apparatus, Forced Vortex Apparatus, Infiltrometer, Hydraulic Ram Pumps, Ground Water Flow Analysis equipment, Fluid Properties and Hydrostatic Bench, and other state-of-the-art apparatus for demonstrative studies.

Also a number of apparatus are available for specialized topics such as hydraulic transients in conduit flow, surge tanks, precipitation and overland flow, flow through porous media, a scaled irrigation model, etc.

In addition, instrumentation is available for field studies (velocity measurements in streams, ultrasound flow measurement for conduits, dye concentration measurements, pumping tests).

Students are also exposed to the use of state-of-the-art analysis and design software packages such as WaterCAD, Culvert-Master, MIKE11/21, Hec-RAS, Civil 3D, and ArcGIS, etc.
Students can be allowed to use the facilities of the computer resources unit of the Department of Civil Engineering (40 desktop computers with printing, intranet network and internet access facilities). Further, the new computer room to be established in the CERC with additional 20 desktop computers and WiFi/wireless access facility for laptop users will also be available. Further, it is proposed to establish a computer room with 30 computers, servers, plotters, scanners, printers etc., having network facilities through fibre optics and wireless links, in UMCSAWM building.

The University of Moratuwa Library is one of the most prominent technology libraries in the country. Its main areas of specializations are Engineering, Architecture and Information Technology. However, the library caters for the requirements of the membership by housing books and reading/audio-visual materials of other disciplines and general interest, too. In addition to this, the UMCSAWM will have a library facility dedicated for the programme with the capacity to be used by at least 50% of the enrolled students and the fulltime staff at any given time. This facility will be developed in future.

The programme is intended to teach Water Management in a regional context and therefore in addition to the teaching facilities and common space available in the Department of Civil Engineering, the programme will have dedicated space for lectures, research, self study and limited outdoor experimental area (100 m x 50 m to develop an urban stormwater drainage demonstration and testing facility), attached to the proposed UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM).

Students can use the space allocated in UMCSAWM building (Reading room, proposed Library) or CERC building (Research Students’ Room, Study Area) for their private/group studies. Students can also be allowed to use the common study areas in the Civil Engineering Department Complex.
Introduction by UNESCO Goodwill Ambassador Late Shri Madanjeet Singh - Founder, South Asia Foundation (SAF)

The South Asia Foundation (SAF) is a secular, non-profit and non-political organization, which was established in September 2000. Its objective is to uphold its core values of regional cooperation and peace through education and cultural interaction between the eight SAARC countries: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

SAF has been admitted into official relationship with the United Nations Educational, Scientific and Cultural Organization (UNESCO) and recognized as an Apex Body of South Asian Association of Regional Cooperation (SAARC). Its aims, objectives, and activities are in conformity with the spirit, purpose, and principles of the two international organizations.

SAF INSTITUTIONS OF EXCELLENCE

The cardinal objective of the organization is to sustain a movement, in particular involving youth, to promote regional cooperation and peace through education, cultural interaction and mutual understanding among the people of South Asia. Taking a step ahead, Institutions of Excellence have been established in all SAARC countries with the objective of promoting regional cooperation through advancements in education. The UMCSAWM is the newest member to join the SAF family of IOEs.

SAF has signed twelve MoUs to establish institutions of excellence in Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. SAF group scholarships will be allocated to each of these institutions, which would enable students from all the eight SAARC countries to study together.

**SAF INSTITUTIONS OF EXCELLENCE**

<table>
<thead>
<tr>
<th>Country</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>UNESCO Madanjeet Singh Centre for Preservation of Afghanistan’s Cultural Heritage (UMCPACH)</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>UNESCO Madanjeet Singh Institute of Human Rights and South Asian Common Law</td>
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<tr>
<td>Bhutan</td>
<td>UNESCO Madanjeet Singh Centre for South Asia Forestry Studies (UMCSAFS)</td>
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<tr>
<td>India</td>
<td>UNESCO Madanjeet Singh Centre for South Asian Journalism (UMCSAJ)</td>
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<td>UNESCO Madanjeet Singh Institute of Kashmir Studies (UMIKS)</td>
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<td>UNESCO Madanjeet Singh Institute for South Asia Regional Cooperation (UMISARC)</td>
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<td>UNESCO Madanjeet Singh School of Green Energy Technology (UMSGET)</td>
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<td>Maldives</td>
<td>UNESCO Madanjeet Singh Climate Research Centre (UMCRC)</td>
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<td>Nepal</td>
<td>UNESCO Madanjeet Singh Centre of Development Studies and Regional Cooperation (UMCDSRC)</td>
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<td>Pakistan</td>
<td>UNESCO Madanjeet Singh Institute for South Asian Arts (UMISAA)</td>
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<tr>
<td>Sri Lanka</td>
<td>UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM)</td>
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</tbody>
</table>

Web: [http://www.southasianfoundation.org](http://www.southasianfoundation.org)
SECTION — V

APPLICATION GUIDE

2020 and 2022 Intakes

Applying to UMCSAWM - SL

Applications are invited for the above course conducted by the UNESCO Madanjeet Centre for South Asia Water Management (UMCSAWM) attached to the Department of Civil Engineering, Faculty of Engineering, University of Moratuwa, Sri Lanka (www.civil.mrt.ac.lk).

SELECTION PROCEDURE

Local Applicants

⇒ For further information and to download the Application Form/Application Guide and the Programme Brochure, please visit the Department webpage, or contact: the Course Coordinator.

⇒ Please submit duly filled application forms (Pages 1-3 of the application form) with confidential recommendations from two non-related referees as instructed in the form (Pages 5-6 & 7-8).

⇒ Closing date for submission of applications for local candidates is will be on 20th August 2019 for 6th intake and will be end of the 20th August 2021 for 7th intake (February 2022).

⇒ Selections will be based on the minimum eligibility requirements stipulated, qualifications and experience, and performance at the interview. Scholarship interviews will be held by UoM/SAF-SL.

Overseas/SAARC Applicants

⇒ Candidates from SAARC countries who intend to apply for South Asia Foundation (SAF) scholarships should submit their duly filled applications (with all supporting documents and certified true copies of certificates) to the Secretariat, South Asia Foundation (SAF) Chapter in their respective country. To be eligible for SAF scholarships, candidates should be below 40 years of age. Please visit SAF website: http://www.southasiafoundation.org/saf_contacts.htm for contact details.

⇒ Candidates from SAARC countries (self-funded) or Non-SAARC countries should submit their duly filled applications (with all supporting documents and certified true copies of certificates) to the Course Coordinator (same as for local applicants).

⇒ Closing date for submission of applications for all international candidates is will be on August 2019 for 6th intake and will be end of the October 2020 for 7th intake.

⇒ South Asia Foundation (SAF) office in each country will pre-screen the applications based on the eligibility criteria mentioned herein and the names of the short-listed candidates from each SAARC country should reach the office of the Secretary, SAF Sri Lanka latest by middle of the August 2019 for 6th intake and middle of the November 2020 for 7th intake through the SAF offices in their respective countries for further scrutiny and acceptance into the degree program at UMCSAWM/ University of Moratuwa, Sri Lanka.
APPLICATION GUIDE

⇒ The final assessment of the selected candidates from SAARC countries will be conducted jointly by a selection committee from the Department of Civil Engineering, University of Moratuwa, Sri Lanka and UMCSAWM. Online assessment tests and/or telephonic/Skype interviews with shortlisted candidates may be arranged as required.

⇒ Based on the final assessment, a candidate may or may not be accepted into the program if SAF offices of the SAARC countries have not fulfilled the set eligibility criteria.

⇒ The right of acceptance or rejection of candidates nominated by SAARC countries into the UMCSAWM/University of Moratuwa degree program is with the UMCSAWM and University of Moratuwa, Sri Lanka.

SAF Madanjeet Singh Group Scholarships

The UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM) at the Department of Civil Engineering, University of Moratuwa, Sri Lanka will offer eight (08) SAF Madanjeet Singh scholarships (based on gender equality) for the one-year Master of Science in Water Resources Engineering and Management programme to be undertaken at the UMCSAWM from February 2020 to January 2022 for 6th intake and February 2022 to January 2024 for 7th intake. One candidate each from a maximum of eight SAARC countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka) will be selected for the scholarship. Based on student and SAF request, extending full-time program duration to 18–24 months as above is under consideration.

The scholarship will cover: (a) Tuition fees, (b) Economy air travel from the scholar’s place of residence within SAARC to Sri Lanka and back, (c) monthly stipend SLRs. 50,000/- based on existing SAARC scholarship rate to cover board and accommodation and a one-time contingency grant of SLRs. 25,000/- upon arrival (e) nominal book allowance and for printing/photocopying (f) Basic medical insurance for overseas students, and (g) In-country travel facilities for academic/research purposes will be provided by the University or reimbursed in-part as per the existing rates.

Documents to be Attached

Please check whether you have attached the following with the application:

1. Copies (certified) of certificates of academic qualifications (degree certificate and transcripts).
2. Copies of certificates of membership/associate membership/graduateship of professional institutions.
3. Letter of consent from employer regarding leave / permission to follow the course (Page 4 of the application) and confidential recommendations from two non-related referees (Pages 5-6 & 7-8).
4. Letter of Sponsorship (if applicable)
5. Copies of certificates of English language proficiency (compulsory for international applicants)

All copies submitted should be certified as true copies of the original documents either by a University Registrar, Legal Practitioner or Justice of Peace/Notary Public. For applicants from SAARC countries, an official from South Asia Foundation (SAF) Chapter in their respective country should be the certifying authority.
**APPLICATION GUIDE**

Submission of Application Forms

Please hand over the duly filled application form to the Department of Civil Engineering, University of Moratuwa, Sri Lanka or send by Registered Post to:

**For Local (Sri Lankan) Applicants**
The Course Coordinator  
M.Sc./PG Dip in Water Resources Engineering and Management  
Department of Civil Engineering, Faculty of Engineering  
University of Moratuwa,  
Moratuwa 10400,  
Sri Lanka

**For International Applicants**

*From SAARC Countries (with scholarship)*  
The Secretariat, South Asia Foundation (SAF) Chapter in their respective country.  
([http://www.southasafoundation.org/saf_contacts.htm](http://www.southasafoundation.org/saf_contacts.htm))

*From SAARC (Self-funded) or Non-SAARC Countries*  
Same as for local applicants.

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**Important Dates**

<table>
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<tr>
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<th>6th Intake</th>
<th>7th Intake</th>
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<td>20th August 2019</td>
<td>20th August 2021</td>
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<td>06th September 2021</td>
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<tr>
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<td>11th September 2019</td>
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<tr>
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<td>07th February 2020</td>
<td>11th February 2020</td>
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<table>
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<tr>
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<td>20th August 2019</td>
<td>20th August 2021</td>
</tr>
<tr>
<td>Pre-screening by SAF/UoM:</td>
<td>30th August 2019</td>
<td>30th August 2021</td>
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<tr>
<td>Pre-screening results sent to UoM</td>
<td>06th September 2019</td>
<td>06th September 2021</td>
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<tr>
<td>Online/Skype interviews:</td>
<td>12th September 2019</td>
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<td>Pre-Selections:</td>
<td>20th September 2019</td>
<td>20th September 2021</td>
</tr>
<tr>
<td>Final-Selections:</td>
<td>30th November 2019</td>
<td>30th November 2021</td>
</tr>
<tr>
<td>Commencement:</td>
<td>07th February 2020</td>
<td>11th February 2022</td>
</tr>
</tbody>
</table>

Please contact the Course Coordinator (WREM) on Tel: +94(011) 2650301 Ext: 216 or Email: lalith@uom.lk or the Secretariat of the South Asia Foundation (SAF) Chapter in your country (SAARC applicants) for further information.
APPLICATION GUIDE

Course Fee Structure

For Local (Sri Lankan) Applicants

*Tuition Fees*
- M. Sc. Full time: Rs. 350,000/= 
- M. Sc. Part-time: Rs. 350,000/= 
- PG Diploma: Rs. 250,000/= 

*Other Fees*
- Registration Fees: First year Rs. 1,000/= 
- Second year Rs. 1,000/= 
- Examination Fee: Rs. 1,000/= 
- Refundable Library Deposit: Rs 2500/= per book (up to 2 books)

For International Applicants

*Tuition Fees & others*
- M. Sc. Full time: US$ 5,000

For UMCSAWM-SAF scholarship program details, please refer Page 25.
Applications are invited for the above course offered by the Department of Civil Engineering, University of Moratuwa, and conducted at the UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM), in collaboration with the South Asia Foundation (SAF). The course scheduled to be commenced in February 2020 is open for both local and international students who wish to pursue a postgraduate degree/diploma with exposure to the knowledge and skills needed to create innovative, integrated solutions to complex water related challenges in the areas of water resources engineering and management. The course is carefully designed to provide a specialist training with a firm grounding in the principles, techniques, issues and practice of water resources engineering and management to practicing engineers and scientists.

ELIGIBILITY REQUIREMENTS

The selection of students to the Masters Degree Programme will be made by the Department of Civil Engineering, in accordance with the following extended eligibility requirements, approved by the Senate.

The Degree of Bachelor of Science of Engineering of the University of Moratuwa, Sri Lanka or an equivalent degree in a relevant field, as approved by the Senate,

OR

At least the Associate Membership of a recognized professional Engineering Institute in a relevant field with a minimum of one (01) year period of appropriate experience, as approved by the Senate,

AND

If English is not the medium of instruction in the first degree of the candidate, valid TOEFL (a minimum of 500 points in paper-based, 173 in computer-based, or 61 in internet-based test) or IELTS (a minimum of 5.0 in Academic Version) scores or equivalent.

Selections will be based on the minimum eligibility requirements above, qualifications and experience, and performance at the interview.

COURSE STRUCTURE

The course delivery is based on eight compulsory modules (28 credits), three optional modules (12 credits) out of 10 offered and a supervised research project (for Master of Science degree). This all-embracing program structure based on taught courses, research and especially with Problem Based Learning (PBL) approach common to all modules brings together the scientific study of water resources with practical planning and management skills.

COURSE DURATION

Minimum Duration of Programs: M.Sc. Course: 12 months (Full-time) or 21 months (Part-time) and PG Diploma: 12 months (Part-time).

COURSE FEES

<table>
<thead>
<tr>
<th>For local applicants:</th>
<th>For overseas applicants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Sc. Full time/ Part-time:</td>
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<td>Rs. 250,000/=</td>
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<td>Registration Fee:</td>
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<td>Rs. 1,000/=</td>
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<tr>
<td>Examination Fee:</td>
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</tbody>
</table>

Refundable Library Deposit: (up to two books)

FINANCIAL ASSISTANCE

South Asia Foundation (SAF) annually offers eight (08) full-paid scholarships to the full-time participants from SAARC countries attending the M.Sc. programme of the UNESCO Madanjeet Singh Centre for South Asia Water Management (UMCSAWM).

APPLICATION PROCEDURE AND CLOSING DATE FOR APPLICATIONS

For further information and to download application forms and the brochure, please visit the Department webpage, or contact:

Course Coordinator, M.Sc. Degree/P.G. Diploma in Water Resources Engineering and Management, Department of Civil Engineering, University of Moratuwa, Moratuwa 10400. Duly completed applications should be forwarded to the same address.

International students should send an e-mail to the Course Coordinator or refer to the Department webpage to obtain application details.

Tel.: (+9411) 581 0260  Website: http://umcsawm.mrt.ac.lk/  E-mail: umcsawm@uom.lk

Closing date for applications: 20th August 2019

Registrar, University of Moratuwa, Moratuwa.
Discover Life at UoM & UMCSAWM

Discover what student life is like in the City of Moratuwa, and at UoM & UMCSAWM. The nearby capital Colombo, one of the largest ports, forms an inspiring environment that includes numerous cultural institutions and festivals, sports and other events.

The UoM & UMCSAWM offer an excellent base for your international study experience: the standard of education on offer is top-class; People of Sri Lanka are best known for their smiley faces, friendliness and hospitality, and with that you will certainly feel at home. With increasing tourist influx, Colombo is becoming a multicultural city and English is widely spoken; and it is easy to get around and meet people.

The UoM students are making an impact - through their outstanding performances both in the classroom and outside of it - while exposing themselves to the splendid life at UoM which makes the UoM education so rewarding.

The extracurricular programmes and facilities available at UoM are organized to cater to competitive as well as recreational sports and physical education for the student population. They provides opportunities for the students to achieve and maintain their physical fitness and to secure a gainful use of leisure time which is very useful for their health. These programmes also seek to foster closer staff student relationship.
INTERNATIONAL EXPERIENCE

AYUBOWAN - UMCSAWM - SL

Ayubowan – Welcome to UMCSAWM and Sri Lanka! The greeting - the native way to say ‘Hello...!’ means “May you have a long life” and is very commonly used in day to day life.

Since the day you arrive in here up-till the end of the programme, it will be a great experience, meeting people from other countries, sharing cultural experiences, while attending classes and learning.

Assistance to Candidates

The UoM/UMCSAWM are responsible for all academic/non-academic matters concerning international students in the programme and SAF Chapters in each SAARC country are willing to extend their assistance in whatever ways possible. The assistance is available in arranging practical matters such as accommodation, basic medical facilities, finding information on local matters, etc., during your stay at UMCSAWM - SL.

Opening hours

Our office is located in the Centre building. The opening hours of our front office are from Tuesday – Saturday from 9.00 a.m. - 4.00 p.m. Please feel free to come and see us!

Contact us

Tel: +94 (11) 2650301
Fax: +94 (11) 2651216
E-mail: lalith@uom.lk

Application procedures

Please visit Page 25 for Application Guide.

INTERNATIONAL COMMUNITY AND THE INTERNATIONAL STUDENT NETWORK

There is a growing international community at University of Moratuwa, including the undergraduate students and postgraduate participants from UMCSAWM. Ministry of Higher Education and University Grants Commission (UGC) are presently paying special attention towards internationalization of Sri Lankan Universities, and we can expect even stronger international community at UoM in the years to come. Possibilities of promoting more international events and activities, encouraging interaction among participants from different countries as well as local participants, will be explored and an alumni association of UoM/UMCSAWM graduates/postgraduates will be formulated, to further enhance UoM’s internationalization efforts.

Further, collaborative research projects with foreign universities and Games Festivals with the participation of foreign university teams have paved way to advocate increased interaction among participants from national, regional, and international institutions.
Lying on the scenic banks of the Bolgoda Lake, the University not only quenches the thirst for knowledge but also provides its students ample opportunity to develop themselves in every way possible.

As a full-time UoM student, you can join any sports club there. There are over 20 clubs from the traditional (Rugby, Cricket, Football, Rowing) to the more off-beat. Why not try out the clubs you are interested in during your stay at Mora?

At UoM, there really is a society for everyone for sure..!

From academic or subject based to dancing or sport, to spiritual, charity or appreciation societies - the possibilities are endless..!

So, whatever you’re into, get involved..!

Some societies are linked to academic Departments and are an excellent way to expand your understanding and appreciation of your subject.

You can join up during anytime at and all manner of attempts are made to persuade you to join particular groups. If, however, you are unable to find a society to suit your
Reminiscences of Previous Batches at UoM/UMCSAWM

3rd Intake - Field trip to Randenigala Dam

5th Intake - Field trip to Mount Lavinia Beach

4th Intake - Field trip to Victoria Dam

3rd Intake - Field trip to Polgolla

5th Intake - Field trip to Mount Lavinia Beach

4th Intake - Field trip to Mapakada
REMINISCENCES OF PREVIOUS BATCHES AT UoM/UMCSAWM

5th Intake - Field trip to Mount Lavinia Beach
3rd Intake - Field trip to Loggaloya tank
3rd Intake - Field trip Dunumadalawa
5th Intake - Field trip to Mount Lavinia Beach
5th Intake - Field trip to Mount Lavinia Beach
5th Intake - Field trip to Mount Lavinia Beach
5th Intake - Field trip to Mount Lavinia Beach
3rd Intake - Field trip to Randenigala Dam
5th Intake - Field trip to Mount Lavinia Beach
Reminiscences of Previous Batches at UoM/UMCSAWM

5th Intake - Field Trip to Mount Lavinia Beach

4th Intake - Field trip to Victoria Dam

3rd Intake - Field trip to Randenigala

3rd Intake - Field trip to Dumumadalawa
STUDENTS ON ROLL AT UOM/UMCSAWM - SL

Ongoing Batch (6TH Intake -2018/2019)

Mr. Syed Mustafa Hedait
Country- Afghanistan
Studied at Nangarhar University - Afghanistan

Mr. Muktar Ahamad Masoud
Country-Afghanistan
Studied at Dawat University - Kabul, Afghanistan

Ms. Choki Zam
Country- Bhutan
Studied at Jaypee University, Solan, India

Ms. Phuntsho Choden
Country- Bhutan
Studied at University of Chitkara - Himalchal, India

Mr. Dheerendra Kumar Yadav
Country- India
Studied at Uttar Pradesh Technical University - India

Mr. Bharat Pandit
Country- Nepal
Studied at Deenhandhu Chhotu Ram University of Science and Technology - Haryana, India

Ms. Sidra Rashid
Country- Pakistan
Studied at University of Engineering and Technology - Lahore, Pakistan

Ms. J. M. Lalani Madhushankha
Country- Sri Lanka
Studied at University of Moratuwa Sri Lanka
## Beneficiaries of Previous Batches

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<th>Status</th>
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<td>2013/2014</td>
<td>Mr</td>
<td>G. Thapa</td>
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<tr>
<td></td>
<td></td>
<td>Mr</td>
<td>M. Jamaan</td>
<td>Bhutan</td>
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<td></td>
<td>Mr</td>
<td>S. Tobgay</td>
<td>Bhutan</td>
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<td></td>
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<td>Mr</td>
<td>H. Chemjong</td>
<td>Nepal</td>
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<td></td>
<td></td>
<td>Mr</td>
<td>W. Keerthiratna</td>
<td>Sri Lanka</td>
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<tr>
<td>Second Intake</td>
<td>2014/2015</td>
<td>Mr</td>
<td>M. B. Sharifi</td>
<td>Afghanistan</td>
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<td>Bhutan</td>
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<td></td>
<td></td>
<td>Mr</td>
<td>D. M. S. S. Dissanyake</td>
<td>Sri Lanka</td>
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<tr>
<td>Third Intake</td>
<td>2016/2017</td>
<td>Mr</td>
<td>U. Wangchuk</td>
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<td>K. Wangmo</td>
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**Students on Roll at UOM/UMCSAWM - SL**

**Alumni List**

- **Name:** Mr. Munaver Jaman  
  **Country:** India  
  **Batch:** First Intake  
  **Current Position:** Research Associate, National Water Centre, United Arab Emirates University.  
  **Message to SAF:** “I am happy to say that UMCSAWM program taught me to work under any circumstances. Overall, it helped me enhance my knowledge and to change my position. It triggered my interest and capacity to learn motivated me to commence my PhD and now I am in the final year. I highly encourage all students to attempt Problem Based Learning Projects with full attention which is very useful to undertake and face any endeavor in your career life.”

- **Name:** Mr. Hemanta Chemjong  
  **Country:** Nepal  
  **Batch:** First Intake  
  **Current Position:** Civil Engineer at WASH Land Blue School, Nepal  
  **Message to SAF:** “This MSc course taught me to be sensitive for climate based and quality based aspects of water. I started to seriously think and positively contribute my part to proper water resources management after attending this program. This course gave me chance to learn and apply state of the art software for water management and modelling. This course is really relevant and one of the best for our career.”

- **Name:** Ms. T. K. N. K. Kumari  
  **Country:** Sri Lanka  
  **Batch:** Second Intake  
  **Current Position:** Chief Engineer at Development Section of National Water Supply and Drainage Board.  
  **Message to SAF:** “I gained lot of knowledge and experience during the UMC/WREM Program such as Integrated Water Resources Management (WRM) techniques, ArcGIS for WRM and various other programs. This program helped me to develop my career in many ways (improve my knowledge, improve presentation skills, report writing, presenting at any conference/meeting, etc.). I highly recommend this program for SAF/ Prospective Students for their career.”

- **Name:** Mr. Pratik Singh Thakuri  
  **Country:** Nepal  
  **Batch:** Third Intake  
  **Current Position:** Research Associate, Centre for Research in Energy Environment and Water (CREEW) Kathmandu, Nepal.  
  **Message to SAF:** “Coming from a nation with huge water resource potential where the nation itself has prioritized water as core competency for development, I had big dream to contribute to my national goals. Fortunately, I got this chance to enroll in WREM course in UMCSAWM where I got to know about hydrology and hydrological processes in depth. The UMCSAWM framed me as skilled hydrologist who can excel in my professional career with confidence now.”

- **Name:** Mr. Ahmad Mohy Ud Din  
  **Country:** Pakistan  
  **Batch:** Third Intake  
  **Current Position:** Civil Engineer in Associated Technologies Limited.  
  **Message to SAF:** “I gathered a lot of technical knowledge during my stay at UMCSAWM. Presentations and effective training to handle rigorous workload is helping me a lot in my career. This course is indeed a great initiative that focuses both on regional cooperation and technical knowledge.”

- **Name:** Mr. K.D. C. R. Dissanayaka  
  **Country:** Sri Lanka  
  **Batch:** Third Intake  
  **Current Position:** Civil Engineer, Colombo Suburban Railway Project, Sri Lanka.  
  **Message to SAF:** “The message I have to deliver to the prospective students joining all UNESCO-SAF study centers, is about the unmatched knowledge and the recognition you gain after the successful completion of the program which is highly useful to find good opportunities in competitive international projects as well as scholarships. This MSc. Program was very helpful for me to find a valuable PhD scholarship and for my career development.”
### Alumni List

#### Name: Ms. P. K. M. Disanayake
**Country:** Sri Lanka  
**Batch:** Third Intake  
**Current Position:** Engineer, National water Supply and Drainage Board, Sri Lanka

**Message to SAF:** "I experienced new and wonderful learning techniques at the UNESCO Madenjeet Singh Centre, University of Moratua, Sri Lanka. The most useful and attractive feature in the Centre was that each subject module was focused with a new project to solve a real-life problems in the field at local and regional level. I gained my knowledge on water engineering to contribute my experience towards sustainable development. I would say this is one of the best places for Water Resource Managers and Engineers to enhance their knowledge under experts and active team and in a nice environment not only in the South Asia but in the entire World."

#### Name: Mr. Noorullah Maroof
**Country:** Afghanistan  
**Batch:** Fourth Intake  
**Current Position:** Senior Water Supply Specialist, Haji Yaqub Square, Afghanistan

**Message to SAF:** "I believe that the program gave me an opportunity to work among the best in their fields and I was guided to conduct a career fitting research. My message to prospective students is that scholars who made up their mind to built-in their careers in Water Resources Engineering and Management should be ready for one year intense study program experience where they will get excellent support, education and family alike environment at the UMCSAWM."

#### Name: Ms. Karma Yangzom Dorji
**Country:** Bhutan  
**Batch:** Fourth Intake  
**Current Position:** Design/Water Resources Engineer, ChimiD Consulting firm, Thimphu, Bhutan

**Message to SAF:** "The experiences and skills I learned from UMCSAWM are priceless. It helped me to intensify my interest towards studying and doing more water related research. After I finished my as course at UMCSAWM, I got employed a Design/Water Resources Engineer in ChimiD Consulting firm the very next month. It has been 11 months since joining the firm and within that period, I worked on Asian Development Bank (ADB), World Bank, WWF and National Environment Commission projects. Working on such projects would be impossible without the skills I got from UMCSAWM."

#### Name: Mr. Mohammad Najim Nasimi
**Country:** Afghanistan  
**Batch:** Fourth Intake  
**Current Position:** University Lecturer, Kabul Polytechnic University, Kabul, Afghanistan

**Message to SAF:** "I am a university lecturer who was honoured with a fully funded scholarship by SAF to pursue this one year Masters program at UMCSAWM. This course boosted my interdisciplinary skills and helped me to have extensive knowledge of solving real-life water problems. I am sincerely thankful to SAF and requesting for expanding such worthy contributions. My message to other fellow members is to study hard and get the maximum benefit of your time, and you will be the future water leaders."

#### Name: Mr. Rohit Adhikari
**Country:** Bhutan  
**Batch:** Fourth Intake  
**Current Position:** Executive Director/Civil Engineer, C/o APECS Consultancy, Bhutan

**Message to SAF:** "I had a good experience at UMCSAWM. There were several courses in the domain of hydrology, hydrodynamics, water management and waste water including contemporary subjects such as GIS. In terms of the working atmosphere, the professors and support staff likewise were very supportive and do not leave any stones unturned to take care of their students (especially for health and safety). The program has given me a wider dimension for thought and analysis of various water related subjects."

#### Name: Mr. Ankit Bhatt
**Country:** India  
**Batch:** Fourth Intake  
**Current Position:** Water Resource Engineer

**Message to SAF:** "I have not just gained knowledge but learnt a different solution approach towards the burning issues on water, while the field trips provided us with a lot of practical knowledge and gave us ideas about the implementation of the methods we were learning during lectures. My message to the prospective students would be, to utilize your time in the best way possible and learn as much as possible because all are very friendly and will always clear your doubts when asked."
**ARRIVAL & DEPARTURE**

The arrival and departure to Sri Lanka to international students will be via either Katunayake International Airport (2-hour journey via Colombo-Katunayake Expressway) or Hambantota International Airport (1.5-hour travel time via Southern Highway).

The national carrier Sri Lankan Airlines operates direct flights to the majority of SAARC destinations.

Travel arrangements for SAARC candidates/scholarship holders will be facilitated with the assistance from SAF Chapters in respective countries and an official letter for facilitation of visa applications will be issued by the UMCSAWM/UoM to all selected candidates.

**Online Visa Application**

**AROUND SRI LANKA**

Sri Lanka offers a wealth of sightseeing and educational/eco-tourism opportunities for sparing your leisure time.

Historical places, religious and architectural monuments, hydraulic civilization nurtured by a rich irrigation heritage, beautiful golden beaches, pristine tropical rainforests, misty mountain ranges, picturesque tea estates, and many other attractions, where all are located just a few hours away from crowded capital city, will add a fascinating experience to your stay in Sri Lanka.
Travelling on public transport is mostly a choice between buses and trains: both are cheap. Trains are a bit slower than buses, but a seat on a train is preferable to standing on a bus!

New expressways are revolutionising how people get around Sri Lanka.

Express/intercity services are operated between main cities and bus travel in Sri Lanka can be interesting and entertaining. Most locals speak at least some English, so you may have some enjoyable interactions.

Domestic flights in Sri Lanka are getting popular and more common with blooming tourism, and daily or even more frequent tours are available to most of the famous tourist destination from Colombo and several other main cities. The national airline flies services using floatplanes/seaplanes offering scenic jaunts between various lakes in the country.

Cycling around historic areas such as Anuradhapura and Sigiriya are the best and most enjoyable ways to see these important sites. More and more accommodation has bicycles (Simple mountain bikes) guests can hire (rent).

Three-wheelers, known in other parts of Asia as tuk-tuks, bajajs or autorickshaws, are literally waiting on every corner and easy way to cover short distant travel at a relatively cheap cost.

Boat rides in inland waterways and lakes and also to offshore islands are operated by Sri Lanka Navy and hotels/tour organisers and you can also experience unique ride in an “Angula”, the Sinhala name for a high floating raft if you join an eco-tour.

Tour and outfitting companies organise cycling tours of Sri Lanka and may also help you get organised for independent travel.
Moratuwa is a major suburb of Colombo city, on the southwestern coast of Sri Lanka, near Dehiwela-Mount Lavinia. It is situated on the Galle-Colombo (Galle road) main highway, 18 km south of Colombo city centre.

Moratuwa is surrounded on three sides by water, except in the north of the city, by the Indian Ocean on the west and the Bolgoda lake on the east. According to the 2001 census, the suburb had a population of 180,000.

The city is bordered by the wetland Bolgoda Lake comprising of North Lake and South Lake connected to each other and to the sea by broad waterways converting the large tract of the Western Province into an island. Today it is a perfect place for sightseeing, with boat trips to the islands, bird watching and fishing expeditions all on offer.

Moratuwa is famous for its music and is home to some well-known musicians.

Enjoy the benefits of living in the most important and prime district and closer to one of Sri Lanka’s most attractive and cosmopolitan cities, the Capital City of Colombo.

With a population of two million, Colombo and its suburbs offer a safe, friendly, multicultural environment with a tropical, outdoor lifestyle. The recently established water parks in the suburbs provide places with a peaceful environment, suitable for maybe a picnic, or even for those looking for a quiet place to study – would best describe the park built on the banks of the Diyawanna Oya.
Bolgoda, presumed to be the largest natural lake in Sri Lanka, covers almost two thirds of the Kalutara District, extending from Moratuwa suburbs. It is also the largest fresh water lake in Sri Lanka. The lake’s depth is said to range from 20-50 feet. The Lake has an eco system, which is rich in wide bio diversity of flora and fauna, a mangrove habitat and the surroundings are blessed with a plethora of natural attractions. It is said to be a world of pure natural beauty mingled with traditional village life in a backdrop of a vast expanse of shimmering waters of the picturesque lake, and well famous for Lake Fishing, Farming, Bird Watching, Boat Riding, Kayaking, Camping, Jungle Biking, and jogging, etc.

The City is also located within just a 15-minute drive from the breathtaking beachfront in Mount Lavinia. Apart from its value in its golden sea-sand, sun tourism, grand colonial architecture, extensive beach frontage, and fragrant tropical gardens, Mount Lavinia is one of the best beaches in Sri Lanka to observe sea shells as well as marine molluscs.

The next main city Dehiwala is situated immediately south of the Colombo city centre. It is a combination of certain key urban suburbs and communities combined for administrative purposes. In addition to the famous beach resorts, it is home to Sri Lanka’s National Zoological Gardens which remains one of Asia’s largest. Dehiwala and Mount Lavinia lie along the Galle Road artery which runs along the coast to the south of the country.
MORATUWA CITY MAP

CITY MAP - MORATUWA

LEGEND
- Police Station
- Institutions
- Bus Route
- Railway Line
- Bus Terminal
  - Railway Station
  - Major Roads
  - Local Road
  - Water Bodies

Map Source: Moratuwa Municipal Council
Every effort is made to ensure the accuracy of all the information provided in this publication at the time of going to press, but all information considered are subject to change and the UMCSAWM-SL reserves the right to alter any details presented in this guide without given notice. UMCSAWM-SL cannot accept the liability arising from changes, errors or omissions.