

FEST holds GIS training for island councils under the “Application and Demonstration of Remote Sensing Project”



“Application and Demonstration of Remote Sensing and GIS Technologies in Solid Waste Management: A Case study of Maldivian Atolls” is a research project led by Fathmath Shadiya and Mariyam Humra under MNU Research Grant Scheme. The main aim of this Research project is to capture and map the status of solid waste management across the Maldives using a Geographic Information System (GIS). The project also aims to familiarize atoll council staff to GIS mapping and drone technology by relating to solid waste management sector of the Maldives.

On June 8th and 9th of 2022, the project team conducted the second batch of training for 12 different atoll council staff and 4 Local Government Authority (LGA) staff. A total of 19 different Atoll council staff have been trained by this project so far. The training sessions were held at GIS computer lab at the Faculty of Engineering Science and Technology (FEST).

On the first day of training, participants were introduced to ArcGIS and Spatial Data. Participants learnt to perform some of the basic functions

such as creating a shape file that can be added as the base-map layer to the ArcGIS software.

In addition, Participants learnt how to create a database using Microsoft Excel and how to link the geodatabase to ArcGIS. For a geodatabase to work, spatial information should be recorded correctly. The participants were taught on how to correctly obtain spatial data for different projects.

On the second day of the training, participants were taken to Villimala for a hands-on training using Phantom 4 Pro V2.0. Participants learnt to unbox the aircraft for their first flight and learned safety guidelines on operating the aircraft before flying the aircraft. By the end of this project, the project team hope to establish a real-time base-maps that will consist of updated solid waste management statistics of all inhabited islands of the Maldives. Solid waste data will be obtained with the help from respective atoll councils and the Local Government Authority (LGA) who took part in the trainings hosted by the research team.



Professional Career Prospects for Engineers in the Maldives

In the past century, there has been a tremendous evolution to the technology and how engineers had contributed. Engineering as a profession is a challenging career, since it requires a solid foundation in Mathematics and science. Engineers require a creative mind to incorporate their knowledge and imagination to invent or prototype complex systems to enhance our daily living. Essentially, Engineers apply the theory and principles of science to find solution to a problem or built devices and machines to perform or replicate task for different applications through research and development. There are various fields and branches in engineering to pursue a career from civil engineering to automobile engineering to electrical to communication engineering. The technological devices and the developing infrastructure we enjoy today have been built by engineers from various fields whether it's the wrist watch we wear or the bridge we use. Many of the pleasures we enjoy today would not be available and our civilization would not be the way it is today without engineers. Thus, engineering is one of the most important and demanding career in any society.

As far as Maldives is concerned, opportunities for Engineers are increasing and new pathways are opening up to explore the future prospects. Engineers are going to play a vital role if Maldives is to achieve the targeted sustainable development goals. Without the technical contribution of the Engineers it would be impossible to deal with the future global environmental challenges heading to us. Maldives would require Engineers from various fields whether it is to tackle the environmental problems or meet the Net Zero goals.

On average Engineers with a bachelor's degree are offered a higher pay than with any other bachelor's degree. Everyone has an aim and vision in their life and shaping it to build a career is challenging if one decides to focus on the needs of the economy. Exploiting the talent you possess requires choosing the right career, education and skills. Assisted career guidance plays an important role here. The future opportunities for engineering as a profession is very bright for Maldives and it's expected to see various new opportunities within the growing industries.

FEST is on its way to announce an integrated engineering degree program for those who would like to pursue a career as Electrical and Electronic Engineer with speculations into communication and power engineering. This program is very well structured to the needs of the Maldivian industry. Students will get an exciting opportunity to exploit their talent in building systems and exploring new technologies in various fields such as Electronics, Robotics, Telecommunication, and Computer Engineering and even into power sector through the electives offered in this course. Students will get opportunities to build career in variety of areas including electrical system design and maintenance of electrical control systems, machinery and equipment to computer engineering and communication. With the specializations this program will bring qualified engineers to fill gaps in the national skills shortage list. Specializations such as power and renewable energy engineering could support national level programs promoting green and sustainable energy by training and increasing qualified workforce across the nation. The existing civil engineering degree program and the success of our graduates in the industry is evident that FEST can play a significant role in building nation through this new degree. Our graduates are currently employed in Building Construction Industry, Infrastructure Development and Water Resources, and Highway and Transport Industry.

How FEST Adds Value to Your Careers



My name is Ahmed Fizal and I am the Climate Change Policy Manager at the British High Commission Male'. I have been working in the field of environmental protection and climate change adaptation for almost a decade now and the first step of my profession career of becoming who I am today was the Bachelor of Environmental Management course which I chose to do at the Maldives National University. Environmental Management has always been more than a job rather a passion for me to become a naturalist.

I started working in this field before actually graduating. In my second year of the degree, I looked out for opportunities to volunteer and be part of programmes, projects and movements that would fulfil my passion, and also add to my resume as work experience. I think this is one advice that I would give to those who are current students in this field; to add to your experience by looking out for opportunities that could be beneficial.

After graduating, I got to work in several international organisations such as UNDP where I got programmatic experience on how international funding on environmental management works. Later, I also got the experience of working in the Government of Maldives, at the National Disaster Management Authority, to work on a project that focuses on Climate Change Adaptation and resilience building, working closely with those effected the most due to climate change and extreme weather. I worked part-time as an EIA consultant taking on projects at a firm, and also as a part-time lecturer at the Maldives National University.

Four years after my graduation of my Bachelor's degree, I was delighted to be chosen among the 5 individuals who got the opportunity to study in the UK under the prestigious Chevening scholarship of the UK government. I got to do my Master of Science in Environmental Impact Assessment and Management at the University of Manchester, graduating with a Distinction and also the Faculty's commendation award for my dissertation. I also got the presidential award for Special Achievement for this academic honour.

It has been a journey of hard work and perseverance, yet it has been fulfilling. I believe it is important to be able to work with people who come from different backgrounds and all walks of life. It is especially important to be able to communicate science at different levels, to be able to transfer the knowledge you have to others that may benefit from it. Equally important is also to learn from others and to keep in mind that everyone is an expert in one area or the other.



דע שיינע וויסן אמערישע וויסן (אויסגעצייכעטע)

אויסגעצייכעטע וויסן איז אן אייגענעם טיפ פון וויסן וואס איז געווען געבויט דורך א פארשונג פון וויסן און פארשונג פון וויסן. דאס איז אן אייגענעם טיפ פון וויסן וואס איז געווען געבויט דורך א פארשונג פון וויסן און פארשונג פון וויסן.

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