Faculty of Engineering Science & Technology



FEST Orientation TERM 2, 2023



FEST Orientation

The orientation program of the Faculty of Engineering Science and Technology (FEST) was held on 10 August 2023. Orientation is held each semester to welcome new students who join the faculty. The orientation program introduces students to life in the faculty and makes them familiar with the university practices and policies, university's academics, extracurricular and boarding facilities. This is also an opportunity to meet with the fellow students and get to know the faculty.

FEST at a glance

Many courses in Computer Science, Information Technology, Architecture, Interior Design, Civil Engineering, in addition to Environmental, Marine, Applied and pure sciences are on offer at FEST.

Our Computer Science students will get hands-on experience with the latest state-of-the-art technologies and also will work on modern projects like building machines with some intelligence.

Our networking subjects are benchmarked with international bodies such as CIS-CO and Oracle. Students will graduate with a

CISCO The faculty will do their best to make sure that the learning environment is up to the standard and graduates are ready to take on jobs in the respected area of study. Many of our past students are leaders in their fields and spearheading the development of their fields of expertise.

The Faculty of Engineering, Science and Technology is the first faculty in the Maldives to offer a Bachelor's degree program in the area of Civil Engineering.

Bachelor of Civil Engineering (Honours) course is aimed ultimately to yield productive employable professionals with up-to-date skills in the field of Civil Engineering. Civil Engineering graduates will be employed as project engineers, project managers, designers, draftsman, technicians and supervisors.





ورۇر ئىرىمى ئەتمۇ يېرىكىرىيە يې THE MALDIVES NATIONAL UNIVERSITY Expanding minds . . . extending horizons Faculty of Engineering Science and Technology The course facilitates the learning process encouraging an enquiring and critical attitude to the craft of engineering. Students are educated to adapt to a changing environment, seeking creative and innovative solutions to open-ended problems, working independently or cooperatively in a group. It also develops individuals to cater to the built industry of the Maldives with technical proficiency in the principles and methods essential to modern civil engineering practice in order to design, construct and operate safe, reliable, healthy, practical, quality and sustainable infrastructures. The curriculum provides competencies in graduates that satisfy the needs of the built industry of the country. So far, we have produced over 50 civil engineering graduates and most of our graduates are currently working in leading organizations in the Maldives.

Currently our department is in the final stages of developing the Bachelor of Electrical & Electronics Engineering degree curriculum and the course expected to begin during the next academic year. This new engineering program will offer exciting career opportunities 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. Currently there is no course running in Maldives in Electrical engineering with components of electronics and communication engineering. The graduates of this course can work with all kinds of electronic devices and they can specialize themselves to build a career in telecommunication, computer engineering and even into power sectors.

Computer Science and Information are two popular areas where students want to build a carrier. However, there is a big misunderstanding between these two areas. Individuals outside the technical industry believe that Computer Science and Information Technology mean the same thing and could be used interchangeably. There is a distinction between these two areas.

Information Technology deals with the development, implementation, support and management of computers and Information Systems. Information Technology involves working with both the hardware and software but on a smaller scale than computer science students. Information Technology graduates will be taught problems related to the business process. In general Information Technology graduates work as a team with other departments or clients. Information Technology graduates involve finding new technologies with existing systems and implementing technologies with existing systems that help meet the goals of the



client or employer.IT professional make sure computers, networks, and systems are functioning properly and should be able to recommend solutions to problems related technology. specializations include Network administration, System administration, Security, IT management, IT strategy and innovation.

Computer Science deals with the development and testing of software and software systems. Computer Science involves working with mathematical models, data analysis and security, algorithms, and computational theory. Computer science graduates can work in areas of artificial intelligence, machine learning, Human-Computer Interaction, Data science, cyber security, cloud computing, and game development.

Computer scientists are the ones who establish the computational principles that are the basis of all software we are using. Their work is behind data transfers and storage, security standards and encryption, and so on. Computer science graduates can work on artificial intelligence, machine learning, human computer interaction, Data science, cloud computing.

In general Computer science is a more technical degree and Information Technology is more business-oriented degree. If the student wants to work on applications and recommend applications and solutions to problems then Information technology is for the student. If the student wants to work on the more scientific side of computing then Computer science is for that student.

The Department of Environment and Natural Sciences offer a variety of courses ranging from Advanced Certificate up to master's level.

Bachelor of Environmental Management is designed to meet the Maldives' future need for skilled professionals in environmental science and management.

Bachelor of Marine Science is an undergraduate degree giving a broad understanding of Marine Science.

Bachelor of Science (Biology/ Chemistry / Physics) is a general





science course with the opportunity for the students to specialize in biology, chemistry, or physics. The main aim of the degree is to develop students with a strong foundation and advanced knowledge in scientific principles in their chosen specialty. After completing this degree students will develop the skills required to work in variety of science related fields and will have a strong understanding of scientific principles, and the ability to analyse scientific information.

The Master of Geospatial Technologies for Disasters programme has a duration of 1.5 years, consisting of three semesters. Upon successful completion of the first two semesters, students have the option to exit the program and receive a Postgraduate Diploma in Geospatial Technology for Disaster.



Land Use Planning in Maldives: Empowering Atoll Councils for Sustainable Development

In an effort to foster sustainable development and enhance local capacities, the Faculty of Science and Technology (FEST) at the Maldives University recently completed a two-week long training focused on managing and administering land use plan development process. The course, organized by the Department of Architecture, brought together technical and administrative staff from all the Atoll Councils of the Maldives, sparking a transformation towards sustainable land management.

The training was held from July 31st through August 13th, 2023, allowing participants to gain a comprehensive understanding of land use planning concepts, practical implementation, and cuttingedge technologies utilized in the planning process. It aimed not only to enhance professional skills, but also to create a broader understanding of the crucial process and the people involved in land use planning, in the councils and among the public.



The training covered a wide range of topics, from basic land use planning concepts to more technical areas, including sustainability and social interaction. The complex aspect of the planning process was illustrated to the participants in interactive theory sessions that included land use management, implementation, and monitoring. A major aspect of the training included utilizing Geographical



Information Systems (GIS) technologies for accurate surveying, planning, and monitoring a key tool in modern-day planning activities.

Another highlight of the program was the exploration of cuttingedge technologies such as aerial surveying using Unmanned Aerial Vehicles (UAV) and data processing applications, providing participants with tools to gather precise data and visualize their planning projects. These technological advancements not only expedite the planning process but also enhance accuracy and efficiency; assisting in informed decision-making.





Land use planning is a collaborative endeavor that engages various stakeholders, each with distinct roles and responsibilities. Atoll Councils play a pivotal role in shaping the future of their regions. This course emphasized the importance of collective efforts, encouraging dynamic interactions between technical and administrative staff. By fostering a shared vision of sustainable development, Atoll Councils are better positioned to navigate the complexities of urban growth, environmental preservation, and socio-economic progress.



The faculty hopes that the knowledge and skills would enable the councils to better monitor, administer the land use development process by working in collaboration with skilled planners, surveyors and other stakeholders in the industry.



The significance of land use planning cannot be overstated. It provides a blueprint for a balanced coexistence between nature and human activities, ensuring that growth is harmonious and environmentally responsible. Effective land use planning leads to optimal utilization of resources, reduction in conflicts, and the creation of vibrant, resilient communities. The training program not only equipped participants with the necessary tools and skills to monitor the planning process but also instilled a sense of responsibility towards the future of their Atolls.



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