

JOB DESCRIPTION

1. JOB DETAILS:		
Position Title:	Lab & Research Engineer	
Reports to:	Head of Sciences & Engineering	
Department:	Sciences & Engineering Department	
Location:	Abu Dhabi, UAE	
Grade:	TBC	
Prepared / Revised on:	January, 2025	

2. JOB PURPOSE / ROLE:

Lab/Research Engineer is expected to maintain and develop the Educational and Research Labs, to assist students and researchers, to welcome external researchers, to perform experiments in the frame of research projects and to be part of the Research projects of the Department. The role will also be part of the students mentoring and will teach Lab sessions in the Bachelor and/or master's in physics. S/he will also collaborate with faculty members, in promoting the department's activities on local, regional, and international levels, serve on committees, and participate in the life of the University.

3. JOB DIMENSIONS				
Number of Staff Supervised:	Direct Reports:	0		
	Total:	0		

4. KEY ACCOUNTABILITIES:			
Key Priority	Key Activities		
 Development and maintenance of the Research Lab 	 Research for and order of new equipment: definition of the needs and specifications with the faculty-members, communication, and follow-up with external providers, and with Procurement & General Services Department, and Finance Department. Carry out test, installation, commissioning of new equipment including calibration, operation and maintenance. Maintenance and calibration of existing devices, follow-up on consumables. Sourcing, installation and utilization of professional/technical software and databases relevant to the Research activities. Programming of digital interfaces for devices and development of tools for data analysis. Train faculty members and students on the equipment, whenever relevant. 		
Participation to the research	Participation to the Research projects of the Department.		



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projects of the Department	 Active part in the design and the set-up of experiments or measurements in the frame of the research projects of the department. Performing and analysing measurements and reporting on them. Participating to research meetings and collaborate with local institutions.
■ Health and Safety	 In collaboration with the Health and Safety Officer, development of Health and Safety procedures in agreement with the best international practices, and with the UAE's regulations. Delivering trainings to the Research Lab users and ensure the completion and the record of all relevant documents by the Research Lab users. Provide training for users of the research laboratory and ensure that all relevant documents are completed by users of the research laboratory, and registered. Attend required and relevant trainings and convey the relevant information to the Research lab users.
 Monitoring the access to the Labs and to the devices 	 Planning of the use of the devices when relevant. Supervising students for labs and projects. Assisting Faculty members during lab sessions, whenever relevant. Welcoming, training and monitoring faculty members and students from other departments. Monitoring the Research Labs pages on relevant websites – as approved by the HoD. Welcoming, training and monitoring external researchers.
 Maintenance and development of the educational labs 	 Inventory and maintenance of the equipment. Preparation of the equipment for the lab sessions, in coordination with the faculty members. Communication with the Department's Academic coordinator to schedule the labs sessions. Determination of the specifications for new experiments with the faculty members and preparation of the orders. Communication and follow-up with external providers, and with Procurement & General Services Department, and Finance Department. Set-up of new experiments, in collaboration with faculty members.
Teaching labs & Community Service	 Teach up to 30 hours of lab sessions per semester. Follow the syllabus, and the content and instructions provided by the instructor of the course. Mark the lab reports, prepare and monitor the lab exams, report the grades in a timely manner. Participation in the assessment activities of the Department, School, and University. Serve on committees. Participation in or organization of Department and University events.
Policies and Procedures	Follow department policies, processes, standard operating procedures, and instructions so that work is carried out in a controlled and consistent manner.
Related Assignments	Perform other related duties or assignments as directed by the Line Manager.



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5. QUALIFICATIONS, EXPERIENCE, & SKILLS:

Minimum Qualifications:

- Master's degree in Physics and/or Engineering or Related Area
- Proven records in Health and Safety Management.

Minimum Experience:

5 years of experience as a Lab engineer

Job-Specific Skills:

- Solid understanding of physical principles and their application to practical systems.
- Good practical skills, and the ability to devise, set up and run tests in the lab.
- Curiosity, creativity, and strong interest for scientific research.
- Strong experimental and analytical skills, particularly in the areas of material science and nondestructive analysis.
- Interest for multi-disciplinary topics, and for collaboration with other disciplines.
- Experience in Material science and/or Cultural heritage analysis is an added advantage.
- Python and/or MatLab knowledge.
- Strong ability to work in a team.
- Planning and organizing skills.
- Uses interpersonal skills to communicate effectively in both one-to-one and group situations.
- Experience with multiphysics software (e.g. COMSOL) beneficial.
- Proficient use of Microsoft Office programs.
- Languages: English is mandatory; French and Arabic are added advantage.

Line Manager Name & Signature:	Employee Name & Signature: