

NAME OF THE PROGRAMME: MASTER OF SCIENCE BY RESEARCH (APPLIED PHYSICS)

Programme Type	Research
Status	Proposal
Start Date	August and January
Module	SP-5000
Description	<p>The Master of Science in Applied Physics in the Physical and Geological Sciences Group, Faculty of Science (FOS), is a programme that fosters pure and applied research in different areas of physics. MSc by Research in Applied Physics includes the short projects in a broad range of pure and applied research topics. The research projects must be original and should incorporate modern techniques and methods.</p> <p>The programme is designed for qualified individuals, who wish to acquire advanced knowledge, as well as analytical and research skills in a discipline of Applied Physics related to industry or academia.</p> <p>Candidates will perform a research project under the supervision of Applied Physics staff members. Moreover, our staff members have established research collaboration with other institutes from Europe and America and the involvement of students in such is highly encouraged.</p>
Research Facilities	The Applied Physics Group is equipped with Scanning Electron Microscope equipped with Energy Dispersive Spectrometer, X-ray Fluorescence Analyser, X-ray Diffractometer, Impedance Spectrometer, as well as a fully equipped laboratory for material synthesis and device fabrication.
Degree Requirements	A written thesis is judged acceptable by the Board of Examiners. The thesis, based on the findings of an approved original research investigation, shall not normally exceed 60,000 words. As stipulated in the relevant UBD regulations, the examiners may subject a candidate to an oral examination or any other test they think necessary to assess the acceptability of the thesis.
Entry Requirements	At least a Second Class (or equivalent) honours Bachelor's degree from a recognised university in a relevant discipline, including but not limited to: Physics, Chemistry and Materials Science. Shortlisted applicants may be interviewed on a case by case basis.
Language Requirements	Relevant English language requirement stipulated by UBD.

Programme Details

Aims and Scope	<p>The MSc Programme in Applied Physics aims to make scientists with high level specialised training, in order to cover the increased needs of Industry in related aspects. Also, students wishing to continue their studies at a PhD level will be able to prepare for the conduction of PhD research on relevant topics.</p> <p>The scope of the Programme is to provide students the necessary specific scientific information, as well as to train them to develop</p>
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	their skills and analytical capabilities.		
Structure	Students conduct an approved research project, with the supervision of one or more staff members. Upon completion of their research, they submit a Thesis, which normally does not exceed 60,000 words.		
Language	The thesis will be written in English; any potential courses will also be given in English.		
Duration of Programme	Full-Time: minimum 12 months, maximum 24 months	Part-Time: minimum 24 months, maximum 48 months	
Areas of Research/Specialisation	Materials Science; Photoelectrochemistry; Computational Physics and Chemistry; Energy Conversion and Storage; Energy Modelling; Energy Efficiency. More areas will be provided upon arrival of new staff		
Attendance Type	Full-Time/Part-Time		
Period of Candidature	Ful-Time:	12-24 months	Part-Time: 24-48 months
Assessment	Assessment includes examination of the thesis by internal and external examiners. As stipulated in the relevant UBD regulations the examiners may subject a candidate to an oral examination or any other test they think necessary to assess the acceptability of the thesis. Periodic assessment of the progress of the candidate is carried out as stipulated in the relevant UBD regulations.		
Demand	Applicants are expected to join the programme from Brunei Darussalam and overseas. The number of applicants is expected to increase in the future, as the programme develops a track record.		
Future Development	The programme is expected to attract students and to develop according to the demands of the community and the industry. New supervisors that will join Applied Physics in UBD will also add new disciplines of research. Increasing number of interdisciplinary and transdisciplinary research is expected to be developed.		

Major Areas	Materials Science; Photoelectrochemistry; Computational Physics and Chemistry; Energy Conversion and Storage; Energy Modelling; Energy Efficiency.
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For More Information

Contact	Programme Leader in Physical and Geological Sciences, Graduate and Research, Faculty of Science (FOS), UBD
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