Postgraduate Program

Accreditation Report

|  |  |
| --- | --- |
| Program Name: |  |
| Location: |  |
| Date of Report : |  |
|  |
| **Assessment Team (AT)** |
| Application Document AT: | 1.
 |
| On-Site AT: | 1.
 |
| Date of On-Site Visit: |  |

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# Executive Summary

## Accreditation recommendation:

# Overview of Accreditation Requirements Status

## Admission Criteria

|  |  |
| --- | --- |
| **Basic degree in physics or equivalent in scientific field** | **Met?** |
| At least 2 years of undergraduate level mathematics, including: |
| *Advanced Calculus* |  |
| *Complex Variables* |  |
| *Differential Equations* |  |
| *Numerical Methods* |  |
| *Applied Linear Algebra* |  |
| Physics topics covered during undergraduate study, including: |
| *Electricity and Magnetism* |  |
| *Atomic Physics/Nuclear Physics* |  |
| *Classical and Quantum Mechanics* |  |
| *Solid State Physics* |  |
| *Modern Physics and Relativity* |  |
| *Thermodynamics/Statistical physics* |  |
| *Signal Processing* |  |
| *Physics of Fluids and Gases* |  |
| *Optics* |  |
| *Computational Physics/Computer Programming* |  |

To detail admission criteria: \_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| **Academic transcripts of admitted students available** | **Met?** |
| *Title* |  |
| Curriculum of basic degree |  |
| *Syllabus of subjects in Mathematics and Physics* |  |
|  |  |

## Infrastructure

|  |  |
| --- | --- |
| **Academic Faculty** |  |
| At least 1 faculty member instructor with a PhD in Medical Physics or Physics with strong academic background in Medical Physics. |  |
| Formal link with clinical medical physics department in a hospital with a teaching mandate |  |
| Clinical department(s) supporting programme complies with minimum medical physics staffing levels |  |
| **Facilities** |  |
| Internet connectivity and access to computer workstations |  |
| Library access |  |
| *Electronic journal access* |  |
| *Relevant reports and publications (ICRU, ICRP, NCRP, AAPM, IAEA, NCS, IPEM, IOMP…)* |  |
| MOU in place providing students with supervised access to clinical equipment |
| *Radiation Oncology* |  |
| *Radiology* |  |
| *Nuclear Medicine* |  |
| Clinical facilities equipped with basic resources required for medical physics laboratory work/practical sessions |
| Radiation Oncology |
| *Teletherapy unit or linear accelerator* |  |
| *IMRT/VMAT techniques* |  |
| *SRS and/or SBRT techniques* |  |
| *Portal image and/or CBCT* |  |
| *Treatment Planning System* |  |
| *Simulator (Conventional and/or CT)* |  |
| *Brachytherapy* |  |
| *Radiotherapy information system*  |  |
| *Medical Imaging Services* |  |
| *Medical physics instrumentation for QA, dosimetry* |  |
| Radiology |
| *General X-ray Units* |  |
| *Fluoroscopy X-ray Units* |  |
| *CT* |  |
| *Mammography* |  |
| *Dental units* |  |
| *Angiography unit* |  |
| *MRI* |  |
| *US units* |  |
| *Medical physics instrumentation for QA, dosimetry* |  |
| Nuclear Medicine |
| *Gamma camera, SPECT or SPECT/CT* |  |
| *PET/CT* |  |
| *Cyclotron for radioisotope production* |  |
| *Dose calibrator, probes and counters* |  |
| *Phantoms and calibration sources* |  |
| *Survey meters and contamination probes* |  |
| *Nuclear Medicine Therapy services* |  |
| *Medical physics instrumentation for QA, dosimetry* |  |
| *Radiation safety* |  |
| *Personal and ambient monitoring service and/or equipment*  |  |
| *Radiation safety service assured to students* |  |

## Medical Physics Modules

|  |  |
| --- | --- |
| **Core Modules, Practical Sessions/Laboratory Work, and Resources** |  |
| Anatomy and Physiology  |  |
| *Laboratory work/Practical Sessions included* |  |
| *Core textbooks available* |  |
| Radiobiology |  |
| *Laboratory work/Practical Sessions included* |  |
| *Core textbooks available* |  |
| Radiation Physics |  |
| *Laboratory work/Practical Sessions included* |  |
| *Core textbooks available* |  |
| Radiation Protection |  |
| *Laboratory work/Practical Sessions included* |  |
| *Core textbooks available* |  |
| Medical Imaging Fundamentals |  |
| *Laboratory work/Practical Sessions included* |  |
| *Core textbooks available* |  |
| Radiation Dosimetry |  |
| *Laboratory work/Practical Sessions included* |  |
| *Core textbooks available* |  |
| Physics of Radiation Oncology |  |
| *Laboratory work/Practical Sessions included* |  |
| *Core textbooks available* |  |
| Physics of Nuclear Medicine |  |
| *Laboratory work/Practical Sessions included* |  |
| *Core textbooks available* |  |
| Physics of Diagnostic and Interventional Radiology |  |
| *Laboratory work/Practical Sessions included* |  |
| *Core textbooks available* |  |
| Professional and Scientific Development |  |
| *Core textbooks available* |  |
| Research Project |  |
| *Elective topics* |  |
| *Equipment management* |  |
| *Health technology assessment* |  |
| *Information and communication technology in medicine* |  |
| *Artificial Intelligence applied to medicine* |  |
| Advanced statistical methods |  |
| Particle therapy |  |

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| **Programme quality management** |  |
| Periodic review of the syllabus (see past syllabus) |  |
| Is the programme in agreement with national rules? |  |
| Existing programme accreditation. Specify:  |  |
| Percentage of graduates working as Clinical medical physicists |  |
|  Laboratory work/practical sessions in other institutions (MoU established) |  |
| Enrollment in research projects (papers published or presentations in conferences) |  |

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| **Clinical training** |  |
| Are the national rules requiring a supervised clinical training in agreement with IOMP/IAEA recommendations |  |
| Percentage of graduates undertaking the supervised clinical training |  |

## Assessment and Evaluation

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| --- | --- |
| **Course Assessment and Evaluation** |  |
| Standard process periodically conducted as per university policy |  |
| **Student Evaluation** |  |
| Student performance for each module is formally assessed |  |

*Comments:*

# Background

# Description of the program

## Program Objective

## Enrollment Requirements

## Structure

## Faculty

## Feedback from Students

## Facilities, Resources, and Equipment (lecture rooms, library, equipment secretary, IT services)

# On-Site Visit Observations and Recommendations to the Program

# Accreditation Recommendations

Appendices

# A-I: On-Site Visit Agenda

# A- II: Photos

# A-III: …