

# NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH BHUBANESWAR

Advertisement No.: NISER/ACAD/MSc-MedPhys/CMRP/2024-25

# ADVERTISEMENT FOR ADMISSION INTO M.Sc. PROGRAMME IN CENTER FOR MEDICAL AND RADIATION PHYSICS

The Center for Medical and Radiation Physics, NISER invites online applications from motivated undergraduate students for admission to the M.Sc. Programme in Medical and Radiological Physics.

#### **ELIGIBILITY**

Candidates possessing a minimum of First class in bachelor's degree in Physical Sciences or an equivalent degree with Physics as one of the main subjects from a recognized University are eligible to apply.

Candidates who are appearing in their Final Examination for bachelor's degree can also apply provided they submit an undertaking that they will submit the Qualifying degree certificates by the time of interview.

Applications will be accepted *Online only*.

Date of Activation of Online
Application : 10<sup>th</sup> April 2024

Last Date of Online Application : 15th May 2024

Tentative Date of Announcement of Shortlist : 31st May 2024

Date of Test/Interview : 1st July 2024 to 4th July 2024

The shortlisting will be based on JAM 2024 / JEST 2024 Mark which will be followed by an interview for the final selection of candidates.

All candidates called for Interview will be paid to and from single second sleeper class railway or bus fare by the shortest route from their place of residence to the Institute (both way). They must produce evidence (railway / bus ticket), a copy of their call letter and bank details in support of their claim. The details of the programme are available on the Center for Medical and Radiation Physics, NISER website. (https://www.niser.ac.in/cmrp/programs)



# Medical and Radiological Physics



## WHERE?

Centre for Medical and Radiation Physics, National Institute of Science Education and Research (NISER), Jatni, Odisha, an autonomous institute under the Department of Atomic Energy (DAE), Government of India affiliated to the Homi Bhabha National Institute, Mumbai.

#### **ABOUT**

Medical physics is the branch of science that mainly deals with the applications of ionizing radiation in health care through radiotherapy, diagnostic radiology, nuclear medicine and the associated radiological protection. Specifically, for past several decades, ionizing radiation is being used worldwide for the treatment of cancer and diagnosis of the various diseases.

The Master's program is the first of its kind in the State of Odisha. It is also the first of its kind at Master's level being conducted by an institution of the Department of Atomic Energy, Government of India.

## SCOPE

The demand for number of radiological and medical equipment is tripling, so the number of the medical physicists also will increase by three times. Hence, there is a <u>need for more medical</u> **physicists to be trained**.

#### Skills developed by students

- Safe use of diagnostic and treatment radiation equipment
- Quality assurance of radiation machines, radiation treatment planning and radiation treatment delivery
- In-depth knowledge on the radiation machine structure and function
- Understanding of principles and physical laws governing the biological effects of radiation
- Solution of radiation therapy technology related problems
- Train junior technicians in radiation therapy and trainee oncologists on the relevant aspects of medical physics
- Innovation in radiation therapy technology to enhance safety, improvement of efficacy and cost effective assurance of service

#### WHO CAN APPLY AND HOW?

Candidates who wish to apply should meet the minimum criteria below:

- 1. First class (60% and above) in Bachelor's degree in Physical Sciences or an equivalent degree with Physics as one of the main subjects from a recognized University. <sup>a</sup>
- 2. Candidates should have JAM 2024 / JEST 2024 scorecards.

Only online applications through the website are accepted.

<sup>a</sup>Candidates who are appearing in their Final Examination for Bachelor's Degree can also apply provided they submit an undertaking that they will submit the Qualifying degree certificates by the time of Interview.

#### PROGRAM DETAILS AND SUPPORT

The master's program in medical and radiological physics has been designed according to the syllabus prescribed by the Homi Bhabha National Institute (HBNI), Mumbai. It has a rigorous curriculum with emphasis on physics, radiology and its medical applications.

Degree awarding in-	:	Homi Bhabha National Institute, Mum-	
stitute		bai	
<b>Duration</b> of the	:	2 years Master's program and 1 year	
course		mandatory internship	
Total No. of seats	:	10	
Minimum qualifica-	:	60% marks in B. Sc with physics as	
tion and selection		a main course and JAM 2024 / JEST	
		2024 scorecards. The shortlisting will be	
		based on <b>JAM 2024</b> / <b>JEST 2024</b> marks,	
		followed by interview for selection	
Fellowship	:	Rs. 16,000/- p.m. + HRA and mentorship	
		grant as per DAE rules, during master's	
		program	
Internship hospitals	:	All India Institute of Medical Sciences,	
as per AERB guide-		Bhubaneswar, Acharya Harihara Post	
lines		Graduate Institute of Cancer, Cuttack	
		and Tata Memorial Centre, Mumbai	

More details about the program are available at: https://www.niser.ac.in/cmrp/

## **UMBRELLA INSTITUTIONS**



#### **Department of Atomic Energy (DAE)**

Anushakti Bhavan, Chhatrapati Shivaji Maharaj Marg, Mumbai, Maharashtra 400001



#### Homi Bhabha National Institute (HBNI)

2nd floor, BARC Training School Complex, Anushaktinagar, Mumbai, Maharashtra 400094



#### Atomic Energy Regulatory Board (AERB)

Niyamak Bhavan, Anushakti Nagar, Mumbai, Maharashtra 400094, India

# COLLABORATING INSTITUTIONS



All India Institute of Medical Sciences (AIIMS), Bhubaneswar Sijua, Patrapada, Bhubaneswar, Odisha 751019



# Acharya Harihar Post Graduate Institute of Cancer (AHPGIC)

SCB Medical Road, Mangalabag, Medical college post office, Cuttack, Odisha 753007



#### Tata Memorial Centre (TMC)

Dr. E Borges Road, Parel, Mumbai, Maharashtra 400 012

# **IMPORTANT DATES**

Date of Activation of online application	:	10 <sup>th</sup> April 2024
Last date of online application	:	15 <sup>th</sup> May 2024
Announcement of shortlisted applicants	:	31 <sup>st</sup> May 2024
Date of interview	:	1 <sup>st</sup> - 4 <sup>th</sup> July 2024
Announcement of final selection list	:	5 <sup>th</sup> July 2024

# WEBPAGE

For applying online, please visit the 'Announcements' section of the NISER website https://www.niser.ac.in/o.scan the QR code.



# CONTACT

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