# Postgraduate Diploma in Magnetic Resonance Imaging Technology -PGDip (MRI-Tech)

Offered by Kerala University of Digital Sciences, Innovation & Technology in collaboration with Wipro GE Healthcare and MR-India Consortium



#### **About Digital University Kerala (DUK)**

Digital University Kerala (DUK) stands as a leading institution, founded by the Government of Kerala through Act 10 of 2021. It is dedicated to postgraduate education and research, emphasizing innovative digital applications in the fields of Science, Technology, and Liberal Arts. DUK's educational approach is centered on fostering entrepreneurship through innovation and research. Additionally, it aims to provide young graduates in Science and Technology with opportunities to delve into industry-relevant themes through diverse post-graduate learning and skill-set development programmes.

#### **Programme Insights**

This programme imparts industry-oriented training with a clear focus on Engineering/Technology & Clinical Development in the Magnetic Resonance Imaging (MRI) space. Knowledge level as a professional after completion of this course, is comparable to professionals serving in Medical Imaging industry with experience in MRI applications in Medicine and pulse sequence development.

Academic training at DUK prepares engineering graduates and post-graduates in science aspiring for a scientific career in medical imaging industry to take up roles and responsibilities for:

- Developing and leveraging clinical partnerships/projects in India and Asia Pacific region in the MRI domain.
- Gaining clinical insights in the workflow of radiologists and identify areas of collaboration to drive strategic research projects in clinical MRI.
- Leveraging prior subject matter expertise to frame & execute regional research policy/strategy in MRI Technology.
- Project management of clinical research activities including but not limited to framing clinical work statements and project proposals, as relevant.

#### **Programme Description**

This programme is offered by DUK in collaboration with Wipro GE Healthcare Private Limited and the member institutions of MR-India Consortium. The PGDip programme in MRI Technology is designed to train graduate students in Engineering and allied Sciences to provide support and co-develop innovative software and hardware solutions for clinically-driven problems. This is designed as a one-year diploma programme.

Students will undertake one semester of coursework that covers the required skill-set followed by an internship project at one of the partnering institutions during the second semester. Each semester will consist of 20 weeks of academic engagement. The last month of each semester will be dedicated for conduct of final assessments and continuation of project work or Thesis preparation. The Special Topics Project (STP) will be assigned to the students at the end of Semester-1, based on a ranking of

their skill-set interests in MR Engineering, Quantitative MRI or Acquisition/Recon areas and relevance to the interests of the partnering institutions in engaging the selected students through an employment/internship contract. The courses offered will focus on skill-set development in the areas related to:

- 1. Programming foundations in MATLAB and Python as part of Applied Medical Image analysis
- 2. Physics of MRI
- 3. Quantitative MRI
- 4. MRI Reconstruction/ Trajectory Design and Optimization/ Compressed Sensing
- 5. Pulse Sequence Programming

#### Five Reasons why you should register:

- Unique Instructional approach using simulations and promoting insight method of learning and problem solving.
- Experiential learning through internships at GE campus, Bangalore.
- Opportunity to work as a team member in real-life MR Engineering problems on-site.
- Career opportunities at GE Healthcare and allied industries / start-ups focusing in MRI Tech.
- Opportunities for peer networking within the International Society for Magnetic Resonance in Medicine (ISMRM) and the ISMRM India Chapter.

#### **Eligibility Requirements**

Students who have completed the Bachelor's degree, or currently in the final semester and completing all requirements for the degree by end of June 2025 in any branch of Engineering or Master's degree in Mathematics, Statistics, Physics, Computer/Data Science, Medical Imaging Technology or related fields from a UGC recognized University are eligible to apply. Entry-level requirement is a minimum score of 60 percentage marks OR CPI/CGPA of 6.5 or above in 10 points in the qualifying degree. Rounding off of marks is not allowed. A candidate with CGPA less than 6.5 will also be eligible if the equivalent percentage for graduation is 60% or above as per the respective university norms for conversion from CGPA to percentage. In such a case, the candidate will have to produce the official document or percentage equivalence certificate from the respective university showing CGPA to percentage conversion norms, at the time of interview. Students who have scored less than 60% in their qualifying degree are not eligible for admission. Candidates belonging to SC/ST and persons with disability categories are eligible for applying if they have minimum pass marks in the qualifying examination. SEBC candidates of Kerala State who are certified as belonging to non-creamy layer are eligible for 5% relaxation in the minimum required marks for qualifying examination, provided that the candidates have passed the examination. Undergraduate level knowledge in programming languages (Python or MATLAB), Algebra and Calculus is a desirable criterion for admission.

#### **Admission Procedure for Sponsored Candidates**

Candidates sponsored by an industry/partnering institution shall provide a letter of reference issued by the parent organization at the time of application. The eligibility criteria for sponsored candidates are the same as that for regular candidates.

## **Admission Procedure for Regular Candidates**

Candidates shortlisted based on the eligibility criteria will be required to appear for a written test followed by interview. A detailed syllabus for the test is made available on the application portal

https://duk.ac.in/Sol/pgdipmi/. Sponsored candidates and Regular candidates with a GATE cut-off above 90 percentile, or valid GRE score above 250 are exempted from appearing for the written test. GATE or GRE score cards with score report dates later than 01/01/2022 will be considered as valid for test exemption. Exemptions need to be obtained in advance by emailing the copies of relevant self-attested certificates to pgdipmi@duk.ac.in with Subject line as "Exemption GATE" or "Exemption GRE". Certificates that do not show the scores will not be considered for exemption from written test. Queries/Issues related to the portal or admission process may also be shared via the same mail id with Subject line "Admission Query".

## **Program Fee Structure (Regular)**

| Head                     | Payment Schedule                         | Amount |
|--------------------------|--|--------|
| Course Fee               | Onetime payment at the time of Enrolment | 40,000 |
|                          | End of Semester-1                        | 20,000 |
| IT Expenses              | End of Semester-1                        | 10,000 |
| Career Advisory Services | End of Semester-1                        | 5,000  |
| Grand Total              |  | 75,000 |

#### **Program Fee Structure (Sponsored)**

| Head        | Payment Schedule                         | Amount |
|-------------|--|--------|
| Course Fee  | Onetime payment at the time of Enrolment | 60,000 |
|             | End of Semester-1                        | 25,000 |
| IT Expenses | End of Semester-1                        | 10,000 |
| Grand Total |  | 95,000 |

#### **Selection Process**

Regular candidates appeared for the written test will be shortlisted for the interview based on the test score. Regular candidates exempted from written test and Sponsored candidates can directly appear for the interview. Final Selection and ranking will be jointly conducted by the Program Admission Committee (PAC) consisting of members representing DUK, Wipro-GE Healthcare, and other partnering institutions based on the interview scores.



#### **Important Timelines**

| Timeline                 | Date          |
|--------------------------|---------------|
| Admission Portal<br>Open | 01-April 2025 |

| Admission Portal<br>Closure   | 02-June 2025   |
|---|--|
| Request for Test exemption  | Till midnight of 02-June 2025  |
| Email Notification<br>for Test/Interview                            | 3-4 weeks prior to the Test/Interview dates.   |
| Test/Interview<br>Dates   | Test/Interview will be conducted in batches scheduled over a period of 3-4 weeks prior to the commencement of the program in June 2025. Candidate will have the option to choose a Test/Interview date within this period. Shortlisted candidates can communicate their preferred dates by replying to the Email intimation. |
| Announcement of<br>Final Rank List<br>and Selection<br>Notification | The Final Rank List will be published at https://duk.ac.in/SoI/pgdipmi/RankList one week prior to the commencement of classes.   |
| Enrolment   | Will be announced in the fourth week of June 2025.   |
| Commencement of Classes   | Will be announced in July 2025.  |

# How to apply

Candidates should first access <a href="https://duk.ac.in/Sol/pgdipmi/">https://duk.ac.in/Sol/pgdipmi/</a> and click the <a href="https://duk.ac.in/Sol/pgdipmi/">Apply Here</a> Link in the landing page to access the Application portal. Application should be made online by creation of a Login and Password.