INFORMATION BROCHURE

Ph.D. Programme

under

Visvesvaraya PhD Scheme for Electronics and IT
(Phase II)

2025-26

Implementation Order No: PhD-04/04-2025/130



SRM Institute of Science and Technology, Kattankulathur, Chennai -603203

Phone: 044-27417140, 27417149

Website: www.srmist.edu.in

01. ABOUT THE PH.D RESEARCH PROGRAMMES

Visvesvaraya PhD Scheme for Electronics and IT-Phase II is initiated by the Ministry of Electronics and IT (MeitY) of the Govt. of India to promote research in the Electronics System Design and Manufacturing (ESDM) and IT and IT Enabled areas (https://phd.dic.gov.in/). Based on the proposal submitted by the Institute, TWO full-time PhD seats are allotted to the Institute by the MeitY under Phase II for the year 2025-26. The research areas available under this scheme for which this call has been released are provided in Annexure A1. The research areas available under this scheme for which this call has been released are provided in Annexure A1.

02. MINIMUM EDUCATIONAL QUALIFICATION FOR ADMISSION TO Ph.D. PROGRAMME IN DIFFERENT DEPARTMENTS / DISCIPLINE

An applicant should possess the following minimum qualifications in appropriate areas to be eligible to apply for admission to the Ph.D. program of the Institute.

1) Computer Science and Engineering

Master's degree in Computer Science and Engineering/Computer Engineering /Information Technology. (Candidates with only MCA / M.Sc / M.Phil are not eligible). GATE candidate is preferable.

2) Electronics and Communication Engineering

Master's degree in Electrical Engineering / Electrical and Electronics Engineering / Electronics Engineering / Electronics and Communication Engineering / InstrumentationEngineering or Master's degree in Physics followed by a Master's degree in Engineering in an area relevant to the research. GATE candidate is preferable.

03. SELECTION PROCEDURE

- a) Selection for the full-time PhD positions under the Visvesvaraya PhD Scheme for Electronics and IT-Phase II shall be done following a TWO- STEP-SELECTION process.
- b) Eligible candidates possessing the minimum educational qualifications and satisfying additional criteria set by the institute will be called for the test at the Institute campus.
- c) Those who clear the test will be called for interview to be conducted by the Department level Committee.
- d) The top performing candidates in the written test and interview in each Department will be called for a final round of interview at the Institute level and selection will be based on the researchareas and Terms and Conditions given in Annexure A1 and A2.

04. NORMS FOR THE P.D STUDENTS SEEKING RELIEF WITHOUT COMPLETION OF THE PROGRAM

The institute expects that all the students joining the PhD Program are to fulfill the objective of the program, such as publication of research papers in reputed journals; patent filing, etc and graduate from the Institute.

05. Other Points for Consideration:

- 1) The admission of candidates is purely based on merit by conducting due selection process.
- 2) Candidates joining Ph.D programme have to submit their original mark/grade sheets along with provisional certificates at the time of admission. They should also produce their required degree certificate for having passed the qualifying examination within three months from the date of registration.
- 3) Reservations are applicable to SC/ST/OBC/Economically Weaker Section (EWS) and admission of Persons with disabilities (PwD) will be as per the rules and regulation of the Govt. of India. The Institute reserve the right to restrict the number of candidates to be called for test/interview to a reasonable number, on the basis of qualifications and or experience.
- 4) All candidates are requested to bring valid Govt ID proof along with the all Educational documents.
- 5) Candidates shall be sole responsible for the correctness and authenticity of the information / documents provided in the online application.
- 6) The last date for submission of the online application shall not be extended under any circumstances. Therefore, candidates are advised to submit their applications well in advance without waiting until the last date.
- 7) Students admitted under the program shall be governed by Ordinance/ Rules and Regulations during the course of their program.
- 8) Candidates are advised to fill up their correct and active e-mail addresses in the online application as all correspondence will be made by the Institute through email/online only.
- 9) The selection is provisional at all stages of admission process till submission /verification of all the documents/fulfillment of prescribed eligibility.
 - 10) If selected, all the original documents will be verified during physical reporting for admission. If anything is found wrong, the applicant's admission shall stand cancelled.

<u>Details of research areas available for Ph. D admission under the Visvesvaraya PhD Scheme for Electronics and IT-Phase II during 2025 -16</u>

Department / School	Broad Areas of Research
Computer Science and Engineering	 Artificial Intelligence Augmented Reality Big Data Cyber Security Data Mining Data Warehousing Human-Computer Interaction Image Processing Internet of Things Machine Learning Natural Language Processing Neuron Networks Pattern Recognition Virtual reality Wireless Sensor Networks
Electrical, Electronics and Communication Engineering	 5G,6G Communications, Artificial Intelligence, Digital Signal Processing, Electric Vehicle, Image Processing, Internet of Things, Machine Learning, Optical communication, Optical Sensors RF design /Wireless Communications, VLSI Design, Wireless Sensor Networks,

Visvesvaraya PhD Scheme for Electronics & IT- Phase II

1. Background

MEITY has approved implementation of Phase-II of Visvesvaraya PhD Scheme for Electronics & IT with the objective of enhancing the number of PhDs in the Electronic System Design and Manufacturing (ESDM) and IT/IT Enabled Services (ITES).

Phase-I of the Scheme, was implemented in 25 states and 4 Union Territories. It has been decided to continue the scheme for Phase-II to help increasing the number of PhDs in the country to enable India to compete globally in the coming decades, to develop an ecosystem of research, development and IP creation in these knowledge intensive sectors.

2. Salient Features of Phase-II

- **2.1** The scheme aims at generating a total of 1000 Full-time PhD Candidates (@200 Candidates per year) and 150 Part-time PhDs (@30 Candidates per year) in emerging research areas of ESDM and IT/ITES sectors over a period of 5 years.
- **2.2** The scheme will also identify and support 50 Young Faculty Research Fellowships (@10 awards/year) to recognize and encourage young faculty involved in research and technology development in the areas of ESDM and IT/ITES.
- **2.3** The scheme would support 225 Post-Doctoral Fellowships for candidates @ 25 seats per year for a period of support of one year to encourage specialized research in emerging research areas under ESDM and IT/ITES sectors. The support has been provisioned for a total of 9 years.
- **2.4** The scheme will have a provision for one time support to 250 Full time PhD fellows for 6 months to facilitate visits to labs abroad, to broaden their research perspective and be in-sync with the state of art research being carried out throughout the globe.

3. Institutions Eligible for Support

- **3.1** All Indian Institutes of Technology (IITs), National Institutes of Technology (NITS), Indian institute of Science (IISc), all Indian Institutes of Science Education and Research (IISERs), Central Universities, Deemed Universities under Central Government, Colleges, and Institutions of national importance will be eligible for support under the scheme.
- **3.2** A University created under Provincial Act, State Act, State Universities, Private Universities, Private Deemed Universities, "Colleges that are allowed to offer PhD", and other academic, R&D institutions with the following eligibility criteria:
 - The Institute should have existing post graduate stream in Electronics/IT and have produced PhDs in these areas for the last 3 years. The PhD student(s) under this scheme to be admitted as per UGC admission norms and
 - The Institute should be recognized by AICTE & NBA (National Board of Accreditation) accredited with respect to Electronics/IT Programmes or The Institute should be accredited by NAAC (National Assessment and Accreditation Council of UGC).
- **3.3** The minimum requirement for eligibility under the scheme will be as per the norms specified by UGC. This will comply to "UGC's Minimum Standards & Procedures for award of M. Phil/Ph.D. Degree, Regulation, 2009" (ref. The Gazette of India July 11, 2009 Part Ill Sec 4) as amended time to time.

4. Full-time PhD candidates (1000 candidates @200 candidates/year):

4.1 Financial Support for Full-time PhD candidates:

- **4.1.1 Fellowship:** Rs. 38,750 per month in 1st& 2nd year and @Rs. 43,750 per month in 3rd,4th and 5th years of PhD. (support till PhD completion or 5 years whichever is earlier).
- **4.1.2** Reimbursement of Rent (RoR): This component is linked with the fellowship of PhD Candidate. The rate of RoR is 24%, 16% & 8% (of fellowship) for X, Y & Z class cities/towns respectively. The classification of the cities is as per the notification issued by the Ministry of Finance for the reimbursement of HRA.
- **4.1.3 Institutional Overheads:** An amount of Rs. 25,000/Year/Full-time PhD candidate for support duration of PhD candidate to be given to the institution. The institutional overheads will be released after completion of required tenure by the respective candidate on pro-rata basis.
- **4.1.4** Research Contingency Grant Support: An amount of Rs. 1,20,000/Year/Full-time PhD candidate for support duration of PhD candidate as per following guidelines:
 - a) Out of Rs. 1.20 Lakh/ year, upto Rs. 30,000/- may be availed by the institute for respective PhD Candidate's miscellaneous expenses relevant to research work- e.g. Books / Documents, Equipment / Software, Consumables / Chemical / Electronic components, Prints of research papers, reports etc., Registration fee for attending Symposia/ Seminars / Conferences in India / abroad where the candidate is presenting an accepted paper, Similar items etc.
 - b) Proposal for Rs. 90,000/- or more upto Rs. 1.20 Lakh (the remaining amount after miscellaneous exp.) for lab equipment (excluding civil construction/expansion of the building) should be submitted to PhD Cell, DIC. It should be signed & stamped by the supervisor, nodal & head of the institute.
 - c) The amount of Rs. 1.20 Lakh under Research Contingency Grant support would be available to the institute only after completion of tenure of one year for a particular candidate and like-wise on pro- rata basis.
 - d) The proposal should clearly specify the utility & role of each of the proposed equipment in research of respective PhD candidate(s). The proposal would cover the item wise cost along with total budget and minimum amount required to place purchase order and amount required at the time of delivery of equipment to the institute.
 - e) The eligibility/unspent balance of a particular year for each Full-time PhD candidate may be carried forward to the next year, till the candidate is supported under the scheme (5 years/PhD completion etc.).
- **4.1.5 Support for attending International Conference:** The support would be available from 3rd year of PhD with following guidelines:
 - a) The support would cover the travel and other expenses of PhD candidates for attending International conferences, where his/her research paper has been accepted for the presentation by him/her
 - b) Paper presentation should be oral (not poster) in an International conference falling in approved list under Visvesvaraya PhD Scheme (subject to revision/review by Academic Committee periodically). The approved list is uploaded on PhD Scheme portal <u>ListOfInternationalConferences.pdf</u>
 - c) A paper of expository nature (e.g. a review paper) will not be considered
 - d) Grant will not be used to attend winter or summer schools.
 - e) The application with invitation letter of the conference to be submitted to the PhD-Cell through the institution.

- f) The grant will be provided to the institution (not to the applicant) for checks & balances and submission of UC
- **4.1.6 Visit to Labs abroad:** The support would be available to the selected Full Time PhD candidates with following guidelines:
 - a) Visvesvaraya PhD Scheme has a provision of one-time support for all the enrolled Full Time scholars, from 3rd year, for 6 months 'Visit to Labs Abroad'.
 - b) During the visit, the Monthly Fellowship will be Rs. 1.50 Lakh. Besides this, the Travel/Visa expenses up to Rs. 1.50 Lakh is provided. During this period, the domestic Fellowship and Reimbursement of Rent (RoR) will be suspended.
 - c) The candidate should complete the visit at least 3 months before either the completion of PhD or the Fellowship support period of 5 years.
 - d) The application with invitation letter is to be submitted to the PhD Cell through the institution.
 - e) The funds for visit abroad will be provided to the institution.
 - f) Upon completion of the visit and returning to the institution, the candidate must submit a detailed technical report about the work done /accomplishment along with publications resulting from the visit, if any, to the PhD Cell. The report should be signed by the guide and endorsed by the head of the institution.
 - g) The applicant would be required to submit the following documents to PhD Cell for availing the support:
 - A valid offer letter from a lab abroad
 - Recommendation letter from the guide of the applicant
 - A copy of valid passport at the time of submission of application
 - Details of publications covering the bibliographical details arising from the research work of the applicant.
 - Copies of the publications for the research undertaken under the scheme.
 - The proposal will be examined by the Academic Committee with a physical interaction with the PhD candidate for the final recommendations.
 - h) PhD Cell, DIC; MeitY reserves the right to hold/ stop/ terminate the support for this component at any stage, including but not limited to:
 - Appropriate progress is not being made.
 - The grant is not being utilized properly.
 - Violation/ Non-compliance of guidelines.
 - Any other reason, which is deemed appropriate by PhD Cell, DIC, MeitY

4.2 Terms and Conditions for support of Full Time PhD Candidates

- **4.2.1** The support will be for additional PhD candidates taken up by an institution. No support would be provided for current levels of enrolment in the PhD programme at the institutions. Transfer from other scholarship schemes would not be permitted.
- **4.2.2** Only the candidates enrolled/registered for PhD during the period of the scheme would be eligible to apply for the financial support. This scheme will be applicable for new PhD Scholars after notification of the scheme.
- **4.2.3** The candidate would be eligible for Fellowship for the period during which the candidate is in good standing, and fulfills the requirements of the PhD successfully. The maximum period for which the support would be available for any Full-time candidate would be five years or till the completion of PhD whichever is earlier.
- **4.2.4** The participating Institution will ensure that a candidate receiving fellowship under this scheme is not receiving any financial support for PhD from any other scheme of Government of India/States etc. at the same time, The candidates who have availed support for their PhD from any other scheme of

Government of India/States etc. will be automatically be disqualified for support under this scheme.

- **4.2.5** The PhD seats allotted for a particular year should be utilized in the same academic year only. The unfilled seats would be automatically pulled back to the general pool of the scheme.
- **4.2.6** The institutions, in the event of any drop-out, need to report it to PhD Cell/DIC immediately. The institutions cannot enroll a substitute candidate on their own. Only the cases which are found extraordinary would be considered for a substitute candidate's enrollment. For this consideration, the institution would require to submit adequate justification beyond the administrative checks and formalities. Any substitute enrolled by the institution without prior permission and due approval of PhD Cell, DIC would not be considered for support under the scheme. Once the institution has recommended the candidate for award of fellowship and the same has been approved under the scheme by the competent authority the fellowship amount and eligible "Reimbursement of Rent" amount will be transferred directly to the bank accounts of the PhD candidate through DBT. The institution will submit annual performance report for each candidate enrolled under the scheme. In case of non- performance of any candidate, the institution shall intimate PhD Cell, DIC regarding the same. In case no such intimation is received, PhD Cell, DIC will continue to transfer the fellowship directly to the bank accounts of PhD candidates.
- **4.2.7** The items of expenditure eligible to be released to the institution like Institutional Overheads, Research Contingency Grant shall be released directly to the institution.
- **4.2.8** The amount to be released under "Support for attending International Conference" and "Visit to labs abroad" will be released as per the requirement on a case to case basis.
- **4.2.9** The institution will be responsible for furnishing utilization certificates of the funds released to them based on the scheme parameters, and as per conditions of the sanctioned grant-in- aid.

5. Part-time PhD candidates(150 candidates): Fellowship @Rs. 3 Lakh on PhD Completion

- **5.1** Part-time PhD seats is provisioned for professionals working at a reputed place/organization
- **5.2** The selected candidates should not be availing any PhD Fellowship/scholarship from any other scheme of Central or State Government.
- **5.3** The seats would be allotted to the institutions based on the assessment of the proposals of the institute, research strength, and the working places of the prospective applicants.
- **5.4** Past performance of the institutions in implementation of the scheme will also be considered while allocating the seats (wherein PhD Cell, DIC would provide the recommendation)
- **5.5** Part-time candidates who do not avail of any PhD Fellowship/scholarship/stipend from any Central or State Government shall be provided a one-time incentive of Rs. 3 Lakh on successful completion of the PhD degree.
- **5.6** Further guidelines if any will be provided subsequently.

6. Young Faculty Research Fellowship (50 awards @10 awards/year):

- **6.1 Research Fellowship** @ Rs. 20,000/Month, in addition to regular income/salary of the awardee.
- **6.2 Research Contingency Grant** of Rs. 5 Lakh/Year
- **6.3** The applicant should be an Indian citizen.
- **6.4** The applicant must have obtained PhD degree from a recognized University with first class (in terms of grades, etc.) in all preceding levels and a good academic record throughout.
- **6.5** The applicant must have a regular position in the institute and should be engaged in research.
- **6.6** The upper age limit for the fellowship is 40 years on the date of submission of application.
- **6.7** YFRF under Visvesvaraya PhD Scheme can be availed only once by a candidate in his/her career.

- **6.8** Proposals for allotment of YFRF are to be submitted through eligible institutions only
- **6.9** Each institution in the proposal may submit up to three nominations for the award for each round of call for applications. The applicant must be an Indian citizen and possess a PhD degree in a relevant area.
- **6.10** The fellowship is tenable only in India and can be implemented in any of the recognized & eligible academic and R&D institution.
- **6.11** The fellowship is purely a temporary assignment, and is tenable for a maximum period of 05 years. The award will initially be for 2 years and further extendible, based on performance review.
- **6.12** Research Contingency Grant can be used for minor equipment, consumables and domestic travel. The host institution should provide necessary administrative and infrastructural support for YFRF.
- **6.13** The fellows are not eligible to receive any other fellowship from any Government or Non Government source during the tenure of the fellowship.
- **6.14** YFRFs are non-transferrable. The research work is to be carried out in the same eligible institution though which YFRF proposal was submitted.
- **6.15** Discontinuation of the Fellowship:
 - The performance of YFRF would be reviewed periodically as per the discretion of PhD Cell, DIC; MeitY.
 - A detailed performance assessment/review of award would be conducted annually and decision on continuation of YFRF would be taken accordingly.
 - If any fellow wishes to discontinue the fellowship, the institution should inform Visvesvaraya PhD Scheme immediately. One month's notice is to be given to DIC through the institution before the date of discontinuation.
 - The implementing institution should not incur any expenditure from the date of termination of the project or the date of resignation of the fellow. The institution will ensure the submission of work report and other requisite documents from YFRF awardee.
 - PhD Cell, DIC; MeitY reserves the right to hold/ stop/ terminate the Fellowship at any stage because of reasons including, but not limited to the following:
 - a) Appropriate progress is not being made.
 - b) The grant is not being utilized properly.
 - c) Violation/ Non-compliance of guidelines.
 - d) Any other reason, which is deemed appropriate by PhD Cell, DIC, MeitY.

7. Post-Doctoral Fellowship (225 candidates' @25candidates/year):

- **7.1 Research Fellowship** @ Rs. 1.08 Lakh/Month
- **7.2** Contingency- Rs. 1 Lakh for 1 year (on re-imbursement and pro-rata basis depending on the period spent under the award). The claim would be submitted by the awardee through respective institution to PhD Cell in prescribed format.
- **7.3** Proposals for allotment of PDF seats are to be submitted by eligible institutions only. Suitable no. of seats would be allotted to institutions for further enrollment of PDF fellows on these seats following the scheme guidelines.
- **7.4** The PDF applicant should be an Indian citizen.
- **7.5** The PDF applicant must have obtained PhD degree from a recognized University with first class (in terms of grades, etc.) in all preceding levels and a good academic record throughout.
- **7.6** The eligible participating institution must ensure that the PDF applicant should have completed PhD within the past 5 years on the last date of submission of application to the institution.
- **7.7** The upper age limit for the fellowship is 40 years on the date of submission of application to the eligible participating institution.
- **7.8** A suitable Mentor/Guide under whom the proposed research would be carried out, must be identified by the institution.
- **7.9** Mentor/Guide of PDF fellow must hold a regular academic/research position in a recognized institution in India. He/she should hold a Ph.D. degree in Science or Engineering.
- **7.10** Preference would be given to the PDF applicants who have active industry linkages and their research proposal is directed towards industry specific problems.
- **7.11** The research proposal of the PDF applicant, to be submitted to the institution, should define clear objectives, outcomes and deliverables against the award.
- **7.12** PDF applicants currently in regular employment will not be considered. However, scientists or researchers with temporary positions in academia or research institutions would be considered however,

they would be required to relinquish their current roles if selected for the fellowship.

7.13 PDF applicants should not have completed their PhD at the same institution where the PDF fellowship is to be awarded.

7.14 Discontinuation of the Fellowship:

- If any fellow wishes to discontinue the fellowship, the institution should inform PhD Cell, DIC; MeitY immediately. One month's notice is to be given by the institution before the date of discontinuation.
- The implementing institution should not incur any expenditure from the date of termination of the award/project or the date of resignation of the fellow. The institution will responsible for submission of work report and other requisite documents.
- In case the post-doctoral fellow undertakes any full/part-time assignment, his/her PDF award under the scheme would be discontinued.
- PhD Cell, DIC; MeitY reserves the right to hold/stop/discontinue the fellowship at any stage, if
 - a) Appropriate progress is not being made.
 - b) The grant is not being utilized properly.
 - c) Violation/ Non-compliance of guidelines.
 - d) Any other reason, which is deemed appropriate by PhD Cell, DIC, MeitY

8. Miscellaneous

- **8.1** Collaborations with internationally reputed academics and R&D Institutions will be encouraged.
- **8.2** IPR generated under the Scheme will be governed by existing rules and regulations of MeitY.
- **8.3** All institutions who will participate would be subjected to Audit of their accounts/records in respect of the scheme as per government norms.
- **8.4** Assets created under the scheme using the research grant to the participating Institutions would be used by Institutions for the research and development activities in these institutions after the end of the scheme.
- **8.5** MeitY may make additions/deletions/modifications in these guidelines at its own discretion.
 - **8.6** Awarding support, it's continuation, discontinuation etc. for component(s) of the scheme would be as per the sole discretion of MeitY and would be final and binding to all the applicants seeking support/beneficiaries.