

INFORMATION BROCHURE

Ph.D. Programme

under

**Visvesvaraya PhD Scheme for Electronics and IT
(Phase II), MeitY, GoI.**



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

Phone: 044-27417140, 27417149

Website : www.srmist.edu.in

1.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 proposals submitted by the Institute, TWO full-time PhD seats are allotted to the Institute by the MeitY under Phase II. The research areas available under this scheme for which this call has been released are provided in Annexure A1.

2. 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.

a) 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)

b) Electronics and Communication Engineering

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

3. 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 written test and technical interview 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.
- 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 research areas and Terms and Conditions given in Annexure A1 and A2.

4. NORMS FOR THE PH.D STUDENTS SEEKING RELIEF WITHOUT COMPLETION OF THE PROGRAM

The institute expects that all the students joining the Ph.D 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. However, if a student wants to discontinue the PhD Program mid-way, the student is required to pay back to the Institute. Students at the time of admission are to execute an indemnity bond in this regard and the format for the same will be shared with the selected students.

5. Other Points for Consideration:

- a) The admission of candidates is purely based on merit by conducting due selection process.
- b) 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.
- c) All candidates are requested to bring valid Govt ID proof along with the all Educational documents.
- d) Candidates shall be sole responsible for the correctness and authenticity of the information / documents provided in the online application.
- e) The last date for submission of the online application shall not be extended under any circumstances.
- f) Students admitted under the program shall be governed by Ordinance/ Rules and Regulations during the course of their program.
- g) 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.
- h) The selection is provisional at all stages of admission process till submission /verification of all the documents/fulfillment of prescribed eligibility.
- i) 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.

**Details of research areas available for Ph. D admission under the Visvesvaraya PhD Scheme for
Electronics and IT-Phase II during Jan 2023**

Department / School	Broad Areas of Research
Computer Science and Engineering	<ul style="list-style-type: none"> • 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
Electronics and Communication Engineering	<ul style="list-style-type: none"> • 5G Communications, • Artificial Intelligence, • Digital Signal Processing, • Electric Vehicle, • Image Processing, • Internet of Things, • Machine Learning, • Neuron Networks, • Optical Sensors • RF/Wireless Communications, • VLSI Design, • Wireless Sensor Networks,

Terms and Conditions -Visvesvaraya PhD Scheme for Electronics & IT- Phase II

1. Full-time PhD candidates:

1.1 Financial Support for Full-time PhD candidates:

- 1.1.1 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).
- 1.1.2 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.
- 1.1.3 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.
- 1.1.4 Research Contingency Grant Support:** An amount of Rs. 1,20,000/Year/Full-time PhD candidate for support duration of PhD candidate.

To avail it, the institution supported under the scheme would need to submit the procurement proposal of the laboratory equipment (excluding civil infrastructure) signed by supervisor, nodal & competent authority of the institute to PhD Cell, DIC.

The proposal should clearly specify the Utility & role of the proposed equipment in the research of the PhD candidate(s) whose eligibility is linked to the proposal. The format of the proposal & additional guidelines, if any would be made available subsequently.

- 1.1.5 Support for attending International Conference:** Support upto Rs. 1.5 Lakhs/Full-time PhD candidate.

This would cover the travel and other expenses of PhD candidate for attending International conferences, where his/her research paper has been accepted for the presentation by him/her. A list of renowned International Conferences related to the areas of ESDM and IT/ITES would be provided for this support under the Scheme along with the related guidelines.

- 1.1.6 Visit to Labs abroad:** A support for each selected Full Time PhD candidate upto Rs. 10.5 Lakhs for visit to labs abroad.

1.2 Terms and Conditions for support of Full Time PhD Candidates

- 1.2.1** 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.
- 1.2.2** 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.
- 1.2.3** 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.
- 1.2.4** 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.

- 1.2.5 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.
- 1.2.6 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.
- 1.2.7 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.
- 1.2.8 The items of expenditure eligible to be released to the institution like Institutional Overheads, Research Contingency Grant shall be released directly to the institution.
- 1.2.9 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.
- 1.2.10 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.

2. Miscellaneous

- 2.1 Collaborations with internationally reputed academics and R&D Institutions will be encouraged.
- 2.2 IPR generated under the Scheme will be governed by existing rules and regulations of MeitY.
- 2.3 All institutions who will participate would be subjected to Audit of their accounts/records in respect of the scheme as per government norms.
- 2.4 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.
- 2.5 Mere submission of a proposal would not entitle the institution for support under the scheme.
- 2.6 MeitY may make additions/deletions/modifications in these guidelines at its own discretion.
- 2.7 Awarding support, its 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.

SOP- Fund Release to Full Time PhD candidates and Institutions

S. No.	Components	SoP to be followed- for reference of the Institutions, PhD Candidates
1.	Monthly Fellowship for Full Time PhD (@Rs. 38750 for 1st& 2ndYear then Rs. 43750 for 3rd , 4th and 5th year)	<p>I. The institute based on administrative approval for PhD seat allotment would enrol the PhD Candidates on these seats following the guidelines of the scheme.</p> <p>II. The PhD Candidates would need to complete their profiles themselves on PhD scheme portal with due verification by the concerned department & nodal officer of the institute. The institute will forward the candidate's detail along with recommendations for their fellowship release. This would be followed by verification by PhD Cell, DIC with respect to compliance to the guidelines of the scheme.</p> <p>III. The details collected through PhD Scheme portal from the eligible PhD Candidates which include their AADHAAR would be sent by PhD Cell, DIC to PFMS in prescribed format for beneficiary registration and subsequently for fellowship transfer through DBT mode.</p> <p>IV. The institute would submit annual performance report for each candidate. In case of non-performance, non-compliance with the scheme's guidelines of any candidate at any point of time, the institution shall intimate PhD Cell, DIC regarding the same immediately. The PhD scheme portal would have a provision for such intimation along with acknowledgement of its receipt by PhD Cell, DIC. The system will alert such intimations to PhD Cell. The institution needs to secure receipts of such intimation by PhD Cell, DIC well in advance but not later than 15th day of a month as the fellowship would be released by DIC through PFMS preferably by end of that month for which fellowship becomes due. In certain circumstances e.g. payment failure due to any reason including the technical ones, the fellowship may be transferred through alternate channels/modes e.g. NEFT transfer to bank.</p> <p>V. In absence of such intimation, PhD Cell, DIC will continue to transfer the fellowship directly to the candidates every month of a financial year.</p> <p>VI. If due to non-intimation or late intimation by the respective institute, the fellowship is released to the candidate by PhD Cell, DIC then it will be the responsibility of the institute to recover that amount paid to the candidate in excess & beyond eligibility. PhD Cell, DIC in its sole discretion may decide to recover it from the amount due to be paid to the institute under other budget heads of the scheme.</p>
2	Reimbursement of Rent (as per GoI norms)	<p>I. During verification of candidate's registration by the concerned department & nodal officer of the institute along with their recommendation for fellowship release to PhD Candidates, the institute will recommend the release of amount towards "Reimbursement of Rent" also for the candidate. The institute would collect the supporting from the candidate & follow all guidelines of the scheme and that of "Government of India" for such claims. PhD Cell, DIC will keep paying the "Reimbursement of Rent" along with fellowship to the eligible Candidates every month.</p>

		<p>II. In the event of any change e.g. change in location by the Candidate leading to change in monthly rent amount or ineligibility, the institution shall intimate PhD Cell, DIC regarding the same. The PhD scheme portal would have a provision for such intimation along with acknowledgement of its receipt by PhD Cell, DIC. The institution needs to secure receipts of such intimation by PhD Cell, DIC well in advance but not later than 15th day of a month as the “Reimbursement of Rent” would also be released by DIC through DBT along with fellowship preferably by end of that month for which it becomes due. In certain circumstances e.g. payment failure due to any reason including the technical ones, the amount may be transferred through alternate channels/modes e.g. NEFT transfer to bank.</p> <p>III. In absence of such intimation, PhD Cell, DIC will continue to transfer the “Reimbursement of Rent” directly to the candidates every month of a financial year.</p> <p>IV. If due to non-intimation or late intimation by the respective institute, the “Reimbursement of Rent” is released to the candidate by PhD Cell, DIC then it will be the responsibility of the institute to recover that amount paid to the candidate in excess & beyond eligibility. PhD Cell, DIC in its sole discretion may decide to recover it from the amount due to be paid to the institute under other budget heads of the scheme.</p>
3	<p>Research Contingency grant @ Rs. 1.20 Lakh/Year/Full Time PhD</p>	<p>I. The institution would submit a proposal based on the eligibility of the full time PhD candidate(s) in prescribed format. The format would include the details of equipment required by them, payment terms, account details of the institute etc.</p> <p>II. The institute would be registered by PhD Cell, DIC on PFMS (if not registered) using the details collected through PhD Scheme portal.</p> <p>III. The proposal would then be examined by PhD Cell, DIC with respect to the guidelines of the scheme & then the institute to procure the equipment as mentioned in the proposal with certain changes if applicable.</p> <p>IV. The institution following the same would procure the equipment and would raise the payment request as per payment terms at PhD Scheme portal.</p> <p>V. PhD Cell, DIC would examine the request and if it is in order then the amount would be paid to the account of Institution through REAT (Receipts, Expenditure, Advances and Transfers) module of PFMS.</p> <p>VI. In case of failure from PFMS, the same would be transferred directly through the account of Digital India Corporation</p>
4	<p>One Time International Conf. Support @ Rs. 1.5 Lakhs/Full Time PhD</p>	<p>I. It is not provisioned for all PhD candidates. Only the selected candidates fulfilling eligibility criteria based on the guidelines to be provided in due course will be supported. A separate Implementation Order governing these components would be issued by PhD Cell, DIC.</p> <p>II. The institution would submit the request based on the eligibility of the full time PhD candidate in the prescribed format. The format would include the payment terms, account details of the institute & the applicant candidate etc.</p>

		<p>III. The institute would be registered by PhD Cell, DIC on PFMS (if not registered) using the details collected through PhD Scheme portal.</p> <p>IV. The request would then be examined by PhD Cell, DIC with respect to the guidelines of the scheme & accordingly the applicant & the institute would be allowed to avail the support.</p> <p>V. The institution & the applicant following the same would raise the payment request as per payment terms at PhD Scheme portal for payment to the institute &/or the applicant candidate.</p> <p>VI. PhD Cell, DIC would examine the payment request and if it is in order then the amount would be paid to the account of candidate and/or the institute as the case may be.</p> <p>VII. The payment to the Institute would be made through REAT (Receipts, Expenditure, Advances and Transfers) module of PFMS.</p> <p>VIII. In case of failure from PFMS, the same would be transferred directly through the account of Digital India Corporation.</p>
5	Institutional overhead @ Rs. 25,000/Year/Full Time PhD	<p>I. Institutional overhead would be transferred based on number of Full Time candidates enrolled at PhD scheme portal and eligible for that year through REAT (Receipts, Expenditure, Advances and Transfers) module of PFMS.</p> <p>II. This amount after calculation at PhD Cell would be initiated at PhD Cell in the beginning of each financial year.</p>
6	One time support for 50 Candidates /yr from 3rd year for Visit to Labs	<p>I. It is not provisioned for all PhD candidates. Only the selected candidates fulfilling eligibility criteria based on the guidelines to be provided in due course will be supported. A separate Implementation order governing these components would be issued by PhD Cell, DIC.</p> <p>II. Fellowship of candidates selected for visit to lab abroad would be transferred in same fashion as regular fellowship of Full Time PhD candidates (point no 1).</p> <p>III. Payment for other amount if any towards travel etc. would be paid following a process similar to point no 4.</p>