VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI – 590 018, KARNATAKA

REGULATIONS FOR

VTU POST-DOCTORAL FELLOWSHIP

(VTU-PDF)

Ref: Approval of the executive council, 193rd meeting under Res. No. 8.1 held on 23-11-2026.

Office of Research & Development

Visvesvaraya Technological University

2026

1. SHORT TITLE AND SCOPE

1.1 These regulations shall be called as the "Visvesvaraya Technological University Post-Doctoral Fellowship regulations, 2026 (VTU-PDF, 2026)."

1.2 These regulations shall apply to full-time post-doctoral fellows appointed by VTU under this scheme.

1.3 The scheme may be implemented by discipline and/or through an annual call, subject to the availability of approved positions, research facilities and budgetary provision.

1.4 The VTU-PDF is a temporary, merit-based, research-oriented and performance-driven fellowship. It shall not confer any right or claim to regular employment at VTU.

2. BACKGROUND AND RATIONALE

VTU has an extensive affiliated-college, autonomous & Constituent colleges ecosystem and a broad mandate in Engineering, Technology, Management and Applied sciences. These regulations are intended to operationalise and strengthen that provision through a transparent, selective and outcome-oriented framework benchmarked against relevant national and international practices.

The scheme is designed as an advanced research fellowship, not as an extension of routine academic employment. It requires strong research credentials at entry, continuity with doctoral research, expert mentorship in the same or a substantially aligned research area, a focus on frontier and emerging research, defined publication standards, mandatory six-monthly in-person reviews, performance-based extension and a maximum tenure of two years.

3. VISION

To establish VTU as a leading national destination for post-doctoral research and encourages a future-ready research ecosystem that translates advanced doctoral expertise into high-quality publications, intellectual property, technologies, sponsored research, collaborations and measurable societal or industrial impact.

4. OBJECTIVES

4.1 Attract high-caliber post-doctoral researchers to VTU through a transparent and competitive selection process.

4.2 Promote advanced research that builds substantially on the candidate's doctoral expertise while addressing contemporary and emerging research challenges.

4.3 Build critical research capacity in frontier areas of Science, Engineering, Technology, Management and interdisciplinary research.

4.4 Increase high-quality publications, citations, patents, prototypes, software, datasets, Technology transfer and externally funded research.
4.5 Promote interdisciplinary, industry-linked, national laboratory and international research collaborations.
4.6 Strengthen research accountability through structured, in-person progress reviews.
4.7 Enhance VTU's research visibility, competitiveness and performance in National and International rankings and assessments.

5. GUIDING PRINCIPLES - PRINCIPLES AND REGULATORY INTENT

5.1 Frontier Orientation: Research shall address a current, emerging, high-impact, or future-oriented problem.
5.2 Expert Mentorship: The Mentor shall have expertise in the same or a substantially aligned research area.
5.3 Selectivity: Entry shall require a strong publication record and a competitive research proposal.
5.4 Accountability: A formal physical/offline review shall be conducted every six months.
5.5 Performance: Continuation and second-year extension shall depend on demonstrated research performance.
5.6 Integrity: Research ethics, publication integrity, and responsible conduct are mandatory.
5.7 Time-Bound Research: The scheme shall have an absolute maximum tenure of two years.
5.8 Institutional Governance: Prevailing VTU norms and decisions of competent committees shall govern matters not expressly covered.

6. NATURE OF VTU-PDF

6.1 Full-time post-doctoral research fellowship.
6.2 Temporary, non-transferable and research-oriented engagement.
6.3 Primarily research-focused.
6.4 Not a degree Programme and not a qualification equivalent to a Ph.D. or other doctoral degree.
6.5 Not a recruitment pathway or assurance of regular employment.
6.6 Subject to approved fellowship positions, host facilities, budget and statutory approvals.

7. ELIGIBILITY OF APPLICANT / CANDIDATE

7.1 The applicant shall possess a Ph.D. degree awarded by a recognised university or institution in a relevant discipline. Applicants who have completed their final Ph.D. viva

voce/defence but have not yet been formally awarded the degree may also apply, subject to documentary proof and any conditions specified in the notification.

7.2 The applicant shall have a minimum of two quality, peer-reviewed research publications published within the preceding two years in journals indexed in Scopus and/or the Web of Science, classified in Q1 or Q2, and/or rated A* or A in the Australian Business Deans Council (ABDC) Journal Quality List, as applicable to the discipline. The applicant must be the first or second author of each publication. All publications shall be subject to verification by VTU.

7.3 The applicant shall be an Indian national and shall not exceed the following upper age limits as on the date specified in the notification:

7.3.1 Unreserved (UR) Category: 35 years.

7.3.2 Other Backward Classes (OBC): 38 years.

7.3.3 Scheduled Castes (SC) / Scheduled Tribes (ST): 40 years.

The relevant date for determining the age and eligibility for category-wise relaxation shall be specified in the notification. Applicants claiming reservation or age relaxation shall submit valid supporting certificates issued by the competent authority.

7.4 The candidate shall demonstrate an active research trajectory and suitability for advanced research in the proposed area.

8. FRONTIER AND EMERGING RESEARCH REQUIREMENTS

The proposed research shall address a contemporary, emerging, high-impact or future-oriented problem. Priority may be given to the following domains, without being limited to them:

8.1 Quantum Science, Quantum Computing and Quantum Technologies

8.2 Artificial Intelligence, Machine Learning, Generative AI and Intelligent Systems

8.3 Robotics, Autonomous Systems and Human–Machine Interaction

8.4 Advanced, Smart, Functional and Sustainable Materials

8.5 Aerospace, Defence and Space Technologies

8.6 Advanced Automotive Technologies, Electric Mobility and Intelligent Transportation

8.7 Lightweight Structures, Advanced Composites and Polymer Composites

8.8 Semiconductors, Nano electronics and Advanced Electronic Materials

8.9 Nanotechnology, 2D/Next-Generation Materials and Functional Nanomaterials

8.10 Energy Storage, Batteries, Fuel Cells and Hydrogen Technologies

8.11 Renewable Energy and Climate Technologies

8.12 Digital Twins, Industrial AI and Industry 4.0/5.0

8.13 Cybersecurity, Trusted AI and Advanced Digital Technologies

8.14 Biomedical Engineering, Healthcare Technologies and Bioengineering
8.15 Additive Manufacturing and Advanced Manufacturing
8.16 Computational Mechanics, Structural Integrity and Digital Engineering
8.17 Sensors, Photonics and Advanced Communication Technologies
8.18 Space Materials, High-Temperature Materials and Extreme-Environment Engineering
8.19 Civil Engineering, Smart Infrastructure, Sustainable Construction, Structural Engineering, Geotechnical Engineering, Transportation Systems, Water Resources, Environmental Engineering and Climate-Resilient Infrastructure Technologies
8.20 Computer Science and Interdisciplinary Technologies
8.21 Any other emerging area identified by VTU, competent scientific and technological agencies, research institutions or industries.

The competent committee may periodically review and recommend updates to the priority research domains, subject to approval by the competent authority wherever required.

9. RESEARCH PROPOSAL

Each applicant shall submit a research proposal of normally 4,000–5,000 words, excluding references, covering the following:

9.1 Title and research domain
9.2 Doctoral research foundation and continuity statement
9.3 State of the art and research gap
9.4 Problem statement, research questions and hypotheses
9.5 Objectives and measurable milestones
9.6 Novelty and expected scientific/technological contribution
9.7 Methodology, work packages and risk mitigation
9.8 Required infrastructure and facilities
9.9 Expected publications, patents/IP, prototypes, software, datasets & other outputs
9.10 Potential for external funding, industry collaboration and technology translation
9.11 Six-month, one-year and two-year implementation timeline
9.12 Relevant references
9.13 The applicant may also submit a separate proposal seeking financial assistance of up to ₹5,00,000 (Rupees Five Lakhs only) towards the procurement of essential research equipment, instruments, accessories and consumables required for the proposed VTU-PDF research work, provided that such facilities or resources are not available at the University. The proposal shall include proper justification, technical specifications, budget estimates and details of the intended utilization. Such financial assistance may be considered subject to the recommendation and

prior approval of the designated Committee and the availability of funds, in accordance with the prevailing VTU financial and procurement procedures.

10. VTU POST-DOCTORAL MENTOR/SUPERVISOR

10.1 Each Fellow shall work under a designated VTU post-doctoral Mentor/Supervisor.

10.2 The Mentor shall have a minimum of ten quality, peer-reviewed journal publications published within the last five years in journals indexed in Scopus and/or the Web of Science, classified in Q1 or Q2 and/or rated A* or A in the Australian Business Deans Council (ABDC) Journal Quality List, as applicable to the discipline, subject to verification by VTU.

10.3 During the five years preceding the application deadline, the Mentor shall have secured research funding exceeding ₹5 lakh through sponsored research projects and/or industry-funded research to be eligible to mentor VTU-PDF candidates.

10.4 The Mentor should preferably have demonstrated experience in product development involving technologies that have attained Technology Readiness Level (TRL) 6 or above. Alternatively, a strong track record of publishing research articles in high-impact journals may be considered desirable.

10.5 Normally, a Mentor shall guide no more than one VTU-PDF Fellow at a time, unless otherwise approved by the competent authority.

11. INDUSTRY EXPERTS AS CO-SUPERVISORS AND MENTORS

11.1 Industry Experts with a Ph.D.: Industry experts holding a Ph.D. may be considered for appointment as Co-Supervisors based on their relevant expertise, research experience, and ability to provide access to industrial research facilities and technical support, subject to VTU norms and approval by the competent authority.

11.2 Industry Experts without a Ph.D.: Industry experts without a Ph.D. may be engaged as Mentors based on their relevant industrial expertise and experience to support the candidate in practical applications, technology development, and industry-oriented research.

12. SUPERVISOR–CANDIDATE RESEARCH AREA ALIGNMENT

12.1 The Supervisor and the PDF Candidate shall have expertise in the same or substantially aligned research area. Supervisor allocation shall be based on the candidate's core research area, proposed research objectives, and the Supervisor's expertise.

12.2 In interdisciplinary research, the candidate's primary research area shall be the principal criterion for Supervisor allocation, while relevant interdisciplinary expertise

shall also be considered to ensure effective guidance and successful completion of the approved research programme.

13. DURATION OF FELLOWSHIP

13.1 The maximum duration of the VTU Post-Doctoral Fellowship (VTU-PDF) shall be two (2) years.

13.2 The Fellowship shall initially be sanctioned for one (1) year. Continuation for the second year shall be subject to satisfactory performance and fulfilment of the prescribed review and extension requirements.

13.3 The total tenure under the VTU-PDF scheme shall not exceed two (2) years. No further extension, renewal, continuation or reappointment under the same scheme shall be permitted.

14. PERFORMANCE-BASED SECOND-YEAR EXTENSION

Extension shall not be automatic. All the following conditions shall be satisfied:

14.1 Satisfactory performance in the mandatory six-monthly in-person progress reviews.

14.2 Substantial progress against approved objectives and milestones.

14.3 At least one additional quality, peer-reviewed journal article arising substantially from the VTU-PDF research shall have been published, formally accepted for publication, or submitted to a journal and shall have successfully undergone the initial editorial screening and been sent for external peer review. Mere submission of a manuscript, without confirmation that it has entered the peer-review process, shall not be considered sufficient. The journal shall be indexed in Scopus and/or the Web of Science, ranked in Q1 or Q2, and/or rated A* or A in the Australian Business Deans Council (ABDC) Journal Quality List, as applicable to the discipline. The publication status, journal indexing and quality classification shall be verified and approved by the Competent Authority of VTU.

14.4 Positive written recommendation from the Mentor.

14.5 Positive recommendation of the Post-Doctoral Progress Review & Recommendation Committee.

14.6 Compliance with research ethics, integrity, IPR, safety and institutional requirements.

14.7 Submission and verification of all required progress and output evidence.

14.8 Approval of the competent authority.

Failure to satisfy the mandatory publication and performance requirements shall result in non-extension. Publication delays shall not create an entitlement to extend the Fellowship beyond the maximum permitted tenure.

15. SELECTION PROCESS

15.1 Issue an open notification inviting applications from eligible candidates.

15.2 Identify and confirm an available Mentor/Supervisor based on the candidate's core research area, proposed research objectives, the Mentor's expertise and willingness to guide.

15.3 Receive online applications and supporting documents.

15.4 Verify eligibility and qualifying research publications.

15.5 Conduct a research presentation and interview.

15.6 Obtain the recommendation of the VTU Post-Doctoral Selection Committee.

15.7 Obtain approval from the competent authority.

16. VTU POST-DOCTORAL SELECTION COMMITTEE

Member	**Role**
Vice-Chancellor or nominee	Chairperson
Dean of the concerned Faculty	Member
Head/Chairperson of concerned Department/School/Center	Member
Proposed VTU-PDF Mentor	Member
External expert from an IIT, IISc, NIT, CSIR laboratory, national research laboratory or equivalent institution	Member
Additional domain expert, where required	Member
Director, Research & Development	Member-Convener

17. SIX-MONTHLY PHYSICAL PROGRESS REVIEW

17.1 A formal progress review shall be conducted every six months from the Fellow's date of joining.

17.2 The Post-Doctoral Progress Review and Recommendation Committee shall ordinarily meet in person at VTU once every six months.

17.3 The review shall cover objectives, experiments/computations, data, analysis, deviations, publications, manuscripts, patents/IP, prototypes/software/datasets, collaborations, facility utilization, expenditure and the next-stage plan.

17.4 The Committee shall specifically assess whether the work constitutes meaningful advancement beyond the doctoral research and remains aligned with a frontier or emerging research problem.

17.5 The Committee's observations and recommendations shall be recorded in writing, retained by the concerned Research Centre and submitted to the Office of Research and Development.

18. POST-DOCTORAL PROGRESS REVIEW AND RECOMMENDATION COMMITTEE

Member	Role
Dean of the concerned Faculty	Chairperson
Head/Chairperson of concerned Department/School/Centre	Member
VTU-PDF Mentor/Supervisor	Member
External expert from an IIT, IISc, NIT, CSIR laboratory, national research laboratory or equivalent institution	Member
Additional subject expert, if required	Member
Director, Research & Development or nominee	Member-Convener

19. EARLY TERMINATION OR CANCELLATION

19.1 The Committee may recommend termination at any time if the research is unsatisfactory, substantially deficient, persistently below the approved standard, deviates materially from the approved plan without adequate justification, or otherwise does not warrant continuation.

19.2 Any formal termination order shall be issued by the competent authority in accordance with applicable VTU norms and the principles of natural justice. The Committee may exercise decision-making powers only to the extent expressly delegated to it by the competent authority.

19.3 Grounds for termination shall include persistent non-performance; plagiarism; fabrication; falsification; fraudulent publication claims; research-ethics violations; serious disciplinary misconduct; unauthorized absence; misuse of funds or facilities; false information; or material violation of VTU rules.

20. FELLOWSHIP AND RESEARCH SUPPORT: FINANCIAL FRAMEWORK

Component	Proposed provision
Year 1 fellowship	₹80,000 per month
Year 2 fellowship (subject to approved extension)	₹80,000 per month
Contingency/research support	₹50,000 per annum

21. LEAVE, ATTENDANCE AND FULL-TIME STATUS

The Fellow shall work full-time on the approved research programme and maintain the prescribed attendance. During the fellowship period, the Fellow shall be entitled only to General Holidays as per the VTU calendar, 10 days of Casual Leave and 2 Restricted Holidays, subject to applicable VTU rules. No other leave shall be admissible. Any absence beyond the permissible leave entitlement shall be treated as Leave Without Pay (LWP), subject to the approval of the competent authority.

22. TEACHING AND ACADEMIC ASSIGNMENTS

The Fellow shall be exempt from regular teaching and academic duties. These include conducting theory and practical classes, preparing teaching materials, evaluating internal assessments and undertaking other routine academic assignments.

23. RESEARCH ETHICS, INTEGRITY AND SAFETY

23.1 The Research Centre of the host institution, through its duly constituted Ethics Committee or other competent institutional committee, shall oversee compliance with applicable research ethics, integrity and safety requirements.

23.2 The Research Centre and/or Ethics Committee shall ensure that all research activities comply with applicable VTU regulations, institutional policies and statutory requirements relating to research integrity, biosafety, human-participant research, animal research and environmental safety, wherever applicable.

23.3 The Research Centre and/or Ethics Committee shall monitor compliance with applicable ethical standards and address reported concerns relating to plagiarism, fabrication, falsification, data manipulation, duplicate publication, fraudulent authorship or other research misconduct in accordance with applicable regulations.

23.4 The Fellow and Mentor shall ensure the safe and ethical conduct of research, including the proper handling of materials, equipment, research data and research participants, wherever applicable, under the oversight of the competent institutional authorities.

24. INTELLECTUAL PROPERTY RIGHTS

24.1 All intellectual property generated under the VTU Post-Doctoral Fellowship (VTU-PDF) shall be owned by Visvesvaraya Technological University (VTU), Belagavi, and shall be governed by the prevailing VTU IPR Policy and applicable laws.

24.2 The Fellow shall promptly disclose all potentially protectable research outcomes to the designated VTU authority for assessment, protection, and registration of intellectual property.

24.3 Upon grant of intellectual property rights and subsequent commercialization, the net revenue received from commercialization shall be shared as follows:

(a) 50% — to be shared collectively by the Fellow, Supervisor and Co-Supervisor, if any.

(b) 25% — to the host institution/Research Centre.

(c) 25% — to VTU, Belagavi.

25. ACKNOWLEDGEMENT

25.1 All publications, patents, and other research outcomes arising from the VTU Post Doctoral Fellowship (VTU-PDF) shall acknowledge Visvesvaraya Technological University (VTU), Belagavi, and include the prescribed VTU affiliation.

25.2 The Fellow shall use the following affiliation in all publications and research outputs arising from the fellowship:

Format to be followed:

Title of the Article
Author Name(s) and Affiliation(s)
Research Centre: Department of Mechanical Engineering
College Name / Research Centre Name, Place
Visvesvaraya Technological University, Belagavi, Karnataka, India

26.INFRASTRUCTURE AND RESEARCH FACILITIES

The Mentor and the Fellow shall be based at the same approved host institution or Research Centre. The host institution shall provide access to the laboratories, computational resources, characterisation facilities, libraries, software and other research infrastructure required for the approved research programme.

27. EXPECTED OUTCOMES

27.1 Research Publications: Publication of at least two research articles in journals indexed in Scopus and/or the Web of Science, classified in Q1 or Q2 and/or rated A* or A in the Australian Business Deans Council (ABDC) Journal Quality List, as applicable to the discipline, subject to verification by VTU.

27.2 Product Development and Technology Readiness: Where applicable to the approved project, development of a functional product, prototype or technology and demonstration of achievement of Technology Readiness Level (TRL) 6/7, supported by appropriate validation and demonstration evidence.

28. COMPLETION CERTIFICATE AND DOCUMENTATION OF RESEARCH UNDERTAKEN

28.1 A Fellow who discontinues or exits the VTU Post-Doctoral Fellowship (VTU-PDF) before completing the full sanctioned tenure may, upon submission of a written request and by providing at least one month's prior notice to the University, be issued a **Letter of Research Undertaking and Period Completed** by the University, subject to verification of the period of engagement, research work undertaken and submission of the required progress reports.

28.2 The issuance of such a letter shall be subject to compliance with applicable VTU regulations, including the submission of required research records, settlement of

outstanding dues, and compliance with research ethics, intellectual property rights and other institutional requirements.

ANNEXURE I – APPLICANT DOCUMENT CHECKLIST

Section	Information to be reported
1	Completed application form
2	Ph.D. degree/provisional certificate
3	Ph.D. thesis title/abstract or summary
4	Detailed curriculum vitae
5	Publication list with DOI and indexing evidence
6	Details and supporting documents for funded research projects, if any
7	Copies/evidence of minimum two qualifying publications
8	Research proposal
9	Any additional document specified in the notification

ANNEXURE II – SIX-MONTHLY PROGRESS REPORT FORMAT

Section	Information to be reported
1	Fellow and Mentor details
2	Approved research title and domain
3	Approved objectives and milestones
4	Work completed during the reporting period
5	Experiments/computation/data/results and analysis
6	Deviation from approved plan, if any, with justification
7	Publications and accepted manuscripts
8	Patents/IP/prototypes/software/datasets
9	Funding proposals and collaborations
10	Facility/resource utilization and expenditure
11	Next six-month plan
12	Mentor assessment
13	External expert/Committee observations
14	Decision: Continue / Continue with Directions / Improvement Plan / Terminate

ANNEXURE III – SECOND-YEAR EXTENSION CHECKLIST

Section	Information to be reported
1	At least one additional qualifying journal article arising from the VTU-PDF research, published or formally accepted in a journal indexed in Scopus and/or the Web of Science, ranked in Q1 or Q2, and/or rated A* or A in the ABDC Journal Quality List, as applicable to the discipline, subject to verification by VTU.
2	Satisfactory mandatory six-monthly in-person reviews.
3	Substantial progress against approved objectives.
4	Positive written recommendation of the Supervisor/Mentor.
5	Positive recommendation of the Post-Doctoral Progress Review & Recommendation Committee.
6	Research ethics, integrity, safety and IPR compliance.
7	Output evidence submitted and verified.
8	Competent authority approval.