

ABOUT VELLORE INSTITUTE OF TECHNOLOGY

Vellore Institute of Technology (VIT) was founded in 1984 and attracts students from various parts of the world because of its academic excellence. The credentials of VIT in academics and research have placed Engineering and Technology: 212th best in the World and 9th best in India (QS World University Rankings by Subject 2024) 10th best University, 13th best research institution and 11th best engineering institution in India (NIRF Ranking, Govt. of India 2024) 6th in India and 687th in the world (US News 2024) The world ranking body namely the QS has given 4 STAR rating to VIT, with that VIT becomes the first institution in India to have the 4 STAR rating. In addition to this, the consortium of industries, FICCI has adjudged VIT as the "Excellence in Faculty". VIT has completed 4 cycles of NAAC accreditation and has been rated as "A++" grade (3.66 out of 4) institution. VIT has introduced many innovations in academic processes such as FFCS (Fully Flexible Credit System), PBL (Project Based Learning) which adds value to every student for better learning. Fully digitalized academic portals and library access assists the students in equipping themselves for 2023 marketplace. Hack-a-thon, Make-a-thon, Math-a-thon, Stat-a-thon as part of curriculum exercise which kindles the interest and the curiosity of students, which motivates them to be better problem solvers, last module in every subject being handled by the industrial experts, making the students contextualize the concepts they study in the classroom, are a few of the innovations that VIT has introduced in their learning system.

ABOUT THE SCHOOL OF ADVANCED SCIENCES

School of Advanced Sciences, VIT consists of Mathematics, Physics and Chemistry departments. The school offers M.Sc. and Ph.D. programmes in all the three disciplines. The

school comprises qualified and research-oriented faculty members whose expertise is in the frontier areas in sciences. Faculty members of SAS have received national and internationally recognized funded projects to the tune of 10 cores on-going projects in SAS. Several research projects of the school are financially supported by some of the leading funding agencies such as NBHM, UGC, CSIR, DRDO, DST, DBT, and others.

ABOUT THE DEPARTMENT OF MATHEMATICS

The Department of Mathematics at VIT, Vellore, holds a prominent position in the academic landscape: earning a QS World Subject Ranking of 201-250 in 2024, and ranking 7 - 9th within India. Recently, the department secured project funding from DST- FIST, further enhancing its research capabilities. The faculty's areas of expertise span a wide spectrum, including algebra, analysis, differential equations, applied mathematics, optimization techniques, statistics, data science, theoretical physics, and computational sciences. The department offers Ph.D. programmes in Mathematics, Statistics and Data Science in addition to M.Sc. (Data Science), M.Sc. (Business Statistics), Integrated M.Sc. (Computational Statistics and Data Analytics) and Integrated M.Sc. (Mathematics) programmes.

ABOUT THIS PROGRAMME This proposal advocates for the adoption of R, a powerful, open- source statistical software, as a primary tool for probability and statistical analysis in research. R provides robust analytical capabilities, an extensive range of packages, and the flexibility to address complex data-driven challenges. Its adoption will enhance research efficiency, reproducibility, and accessibility.



VIT[®]

Vellore Institute of Technology

(Deemed to be University under section 3 of UGC Act, 1956)

R PROGRAMMING FOR RESEARCHERS A TOOL FOR PROBABILITY AND STATISTICS HANDS-ON APPROACH

03rd and 04th December 2025

Organized by

**DEPARTMENT OF MATHEMATICS
SCHOOL OF ADVANCED SCIENCES
VELLORE INSTITUTE OF TECHNOLOGY
VELLORE – 632014**

Coordinators

**Dr. M.MUBASHIR UNNISSA
Dr. N.SHOBANADEVI**



VIT – A Place to Learn; A Chance to Grow

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HoD, Department of Mathematics

Coordinators:

Dr. Mubashir Unnissa

Associate Professor Grade 2

Department of Mathematics

Dr. N.Shobanadevi

Assistant Professor Senior Grade 2

Department of Mathematics

Objectives:

1. Enhance Analytical Capability: Leverage R's advanced statistical functions and libraries for sophisticated probability and statistical analysis.

2. Cost Efficiency: Eliminate the need for

expensive software licenses by using a

free, open-source solution.

3. Reproducibility: Facilitate reproducible research through well-documented scripts and shared codebases.

4. Collaboration and Learning: Encourage collaboration within the research community by using a widely adopted tool.

REGISTRATION DETAILS

Participants are requested to register through online by paying the required registration fees (non-refundable) using the below link.

Registration Link:

<https://docs.google.com/forms/d/1ID6TbBVtCqIQSNUQSgAArZptVJGKIXHytlU4jnAc4I>

IMPORTANT DATES

Last Date for Registration: 02nd December 2025

Event Date: 03rd and 04th December - 2025

Registration Fee Details: There is no registration fee required

Venue: PRP 450

TARGET AUDIENCE: PHD Degree (Research Scholar)

CONTACT DETAILS

Dr. M.Mubashir Unnissa 📞 9884899725

✉️ mubashira@vit.ac.in

Dr. N.Shobanadevi 📞 9486424245

✉️ n.shobanadevi@vit.ac.in

RESOURCE PERSONS:

Dr. M.MUBASHIR UNNISSA,

Dr. N. SHOBANADEVI

Dr. RAMESH KUMAR

Dr. MOKESHRAYALU G

Dr. K. SATHYANARAYANA SHARMA

Dr. VANITHA R

Dr. KALPANAPRIYA

Dr. K. THILAGAVATHI

The Brochure and the Registration Form may be downloaded from the Institute website www.vit.ac.in

