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 COURSE

The present value added program aims to highlight the recent developments in a variety of Business problems in Payroll, Depreciation, Annuty etc. This course is expected to provide a basic understanding of important quantitative tools and their elementary application to business problems. This course is designed to provide the prospective users of financial supporting information, an understanding of fundamentals in Business". Another notable aspect of this course is to introduce business problems using Mathematical concept to address the real- world problems.

VIT – A Place to Learn; A Chance to Grow

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Dean, SAS
Convener
Dr. Khadar Babu SK
HoD, Department of Mathematics

Coordinators:
Dr. K.Thilagavathi
Associate Professor,
Department of Mathematics
Dr. N.Shobanadevi
Assistant Professor Senior 2
Department of Mathematics

Topics to be covered
Introduction to Business Mathematics
Pay-Roll
Depreciation
Annuties
Stocks and Shares
Discount on bills
Matrices
Differentiation

REGISTRATION DETAILS

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

Registration Link: https://events.vit.ac.in/

IMPORTANT DATES

Last Date for Registration: 26th JAN 2026

Event Date: 27th to 30th (January)- 2026

Registration Fee Details: Rs.350/- ((Inclusive of GST)
Venue: TT513.
Course certificate will be awarded on successful completion of course. Participant confirmation will be on first come first serve basis.

TARGET AUDIENCE: Students of any UG/PG/ Degree, PHD Scholar

CONTACT DETAILS
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✉kthilagavathi@vit.ac.in
Dr. N.Shobanadevi ☎ 9486424245
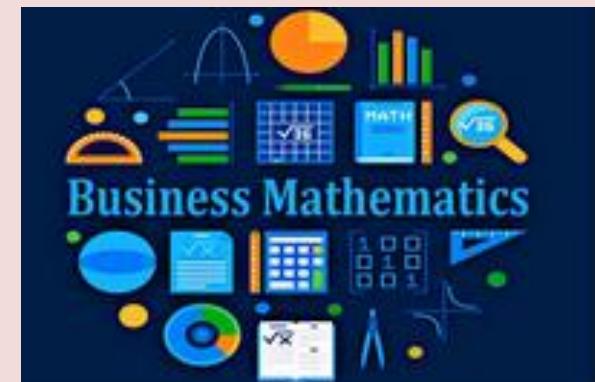✉n.shobanadevi@vit.ac.in

RESOURCE PERSONS:
Dr. K. **THILAGAVATHI, SAS**, VIT, Vellore

Dr. **N. SHOBANADEVI ,SAS**, VIT, Vellore

1. Selection will be made purely on First Come First Serve Basis and Eligibility. (Subject to fulfilling of the seats available).

2. Maximum fifty (50) participants will be accommodated in the course. The Brochure and the Registration Form may be downloaded from the Institute website www.vit.ac.in

Course Code: VAC2504	Course Title: Business Mathematics for Management
School / Centre:	School of Advanced Sciences [SAS]
Beneficiaries: UG / PG/ Research	UG/PG/Research
Course Objectives:	• To present comprehensive, compact and integrated treatment of the most important branches of Business mathematics are payroll and budgeting. • Enhance to use business mathematics to model the physical situations into mathematical problems for Aspiring Analysts and Business Strategists • To use of stocks and shares to analyze the various types of finance related problems.
Course Outcomes:	At the end of the course, students are expected to • Explain payroll problems including gross pay and net pay. • Implement various types of depreciation methods. • Apply Annuities and their Applications to solve sinking fund and budgeting problems. • Evaluate business problems involving Discount on bills and solution of Bank related problems. • Assess the applicability of matrices as mathematical tools in representing a system of equations. • Use differential calculus to solve simple business problems.

S. No.	Topic	Duration (hours)
1	Pay roll , Wages ,Gross pay-Hourly rate and hours worked, overtime, salary, commission, Net pay	**4 Hours**
2	Depreciation and salvage value-straight line method-Units of production method- Doule declining balance method-Sum of the year's digits method.	**5 Hours**
3	Annuities- sinking funds and Amortization and capital budgeting.	**5 Hours**
4	Stocks, Shares, Distinction between stocks and shares.	**4 Hours**
5	Discount on bills, Nominal due date and legal due date, Present value, Banker's Discount, Relation connecting present value and the sum due.	**4 Hours**
6	Introduction of Matrices, Special Types of Matrices, Matrix Algebra, Determinant, Minor and Adjoint Matrices, Inverse of a Matrix and Elementary Row Operations, Solution of System	**4 Hours**

	of Linear Equation by Matrix Method.	
7	Differentiation- Rules of Differentiation, Rates of Change - Higher-Order Derivatives-Chain Rule, Applications of Derivatives- Average cost, Marginal cost, Average Revenue, Marginal Revenue.	**4 Hours**
	Total Course Duration	**30 Hours**
	Date of Board of Studies in which it is recommended	**11.11.2024**