

# SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

(Deemed to be University)

www.sssihl.edu.in

Department of Management and Commerce & IQAC jointly offer a Faculty Development Programme (FDP) on

Financial Modeling using Excel VBA, R, and AI Tools

This online FDP is open to Faculty Members of Business Schools/Colleges/Universities across India offering MBA, MMS, MS in Finance, M.Com and the related UG courses.

# Resource Persons:

Dr.L.Goverthanan, MS, FCMA. Dr.Subramanian S. Iyer, MBA, FRM.

# **Objective:**

To support the professional growth of faculty members by equipping them with the necessary skills to incorporate technology into their teaching methodologies effectively. By doing so, the program aims to cultivate an engaging learning atmosphere that inspires students and encourages them to comprehend and utilize the concepts being taught. Specifically tailored for college educators, this FDP will prioritize the transmission of practical skills and knowledge to better meet the needs of the academic setting.

# Expected Outcome:

Upon completion of this course, educators will gain proficiency in financial modeling and revolutionize their teaching techniques by incorporating accessible opensource tools! Tailored for college educators, this Faculty Development Programme is designed to enhance understanding of financial modeling using Excel-VBA, R, and AI. Educators will empower students to easily grasp and master these skills, fostering motivation and engagement in the learning process.

### Duration:

This online FDP is from 06.05.2024 to 21.05.2024 between 6 pm to 8.30 pm on all days excluding Sundays.

#### Resource Person: Dr. L. Goverthanan

Dr. L. Goverthanan, an Honorary Associate Professor at SSSIHL in the Department of Management and Commerce, holds a Fellowship with ICAI. His academic journey includes a B.Sc in Statistics from St. Joseph's College, Trichy, an MS in Management Systems from BITS, Pilani, and a PhD in Management from Birla Institute of Technology, Mesra, Ranchi. With nearly four decades of industry experience in Finance and Financial Analytics, Dr. Goverthanan has made significant contributions to various sectors.

He served as the Financial Controller at M/S Ashok Leyland, a \$5 billion automobile company, where he gained exposure to a wide range of financial and operational strategies crucial to the company's growth trajectory. His responsibilities encompassed financial evaluation and budgeting, business analytics for top management, SAP implementation as a steering committee member, and leadership roles in business process reengineering and strategic cost management. Additionally, he managed retiral fund investments, payroll, and executive training and development in finance and operations.

Dr. Goverthanan has held several other significant positions, including Trustee for Dharam Hinduja Matriculation Higher Secondary School, Chennai, and Trustee for Ashok Leyland PF Trust, overseeing funds exceeding Rs. 1200 crores, as well as Superannuation Fund Trust and Gratuity Fund Trust, with a combined fund size of over Rs. 700 crores. He also served as a Guest Faculty at IGTC (Indo-German Training Center, Chennai) for the PGDBA program.

In addition to his academic and industry roles, Dr. Goverthanan has also shared his experience at prestigious institutions such as IIM Kashipur and ICAI, Chennai. He has presented on best practices in PF Investment Management at a conference presided over by the Central Provident Fund Commissioner and highlighted pioneering efforts in introducing the National Pension System (NPS) in the industry at an IRDA-organized conference on the National Pension System. Dr. L. Goverthanan's diverse research interests encompass the intersections of ancient wisdom and modern management principles, including Bhagavad Gita and Management, Vedic mathematics, Data analytics, and Green Finance. His passion for exploring these areas drives his scholarly pursuits and applications in the field.

Driven by a desire to impart his expertise and knowledge to the next generation of leaders, Dr. Goverthanan has transitioned to the education sector. He is currently serving as an Honorary Associate Professor at SSSIHL in the Department of Management and Commerce. In this role, he teaches a range of courses to MBA students, including Data Science with R, Big Data Analytics for Business, Corporate Financial Strategy, IAPM, Financial Derivatives, Financial Modeling, and Advanced Operations Research applications.

His commitment to nurturing future talent and his dedication to giving back to society underscore his role as an educator and mentor. Dr. Goverthanan's blend of academic rigor and practical experience equips students with the skills and insights needed to thrive in the dynamic landscape of business and finance.

#### Co-Resource Person: Dr. Subramanian lyer

Dr. Subramanian Iyer holds an MBA and Ph.D. in finance and FRM® (GARP). His PhD dissertation was on "Stylized Facts & Second Generation Models for Risk, Return and Portfolio Allocation: A Study on the Indian Equity Market" (awarded 2008). He distinguished himself academically by securing gold medals in B.Com. (Hons.) and MBA. Dr. Iyer teaches papers in Finance and Data Science in the MBA program at SSSIHL. He is currently pursuing a Postdoctoral Fellowship at the Indian School of Business, Hyderabad.

His current areas of teaching also include Finance , investing, advanced MS Excel, data visualization, dashboarding and storytelling with Tableau. Some of his work has involved applying the tools in machine learning to improve financial decision making. He is a champion of Free Open Source Software and handles software labs in Python and R in which he has authored a package. He has supervised 2 PhD dissertations in Behavioral Finance and over 100 MBA dissertations.

### Topics for FDP

- 1. Creating user functions that are not in Excel as built-in but often required such as functions for computing Income tax (new) regime, DCF functions with varying interest and cash flow stream, discounted payback period, PV/FV of growing Annuity/cashflows, function for computing convexity, etc.
- 2. Enabling such user functions portable for use in any file.
- 3. Recording Macros and creating viz. EMI calculator / PV calculator with a schedule at the click of a widget for various values of arguments and making it reusable.
- 4. Creating Ribbon Menus for various user-defined topics for easy maneuverability.
- 5. BEP Model simulation using widgets
- 6. Optimisation Model using Excel solver and automating the same for various input values.
- 7. Sensitivity and scenario analysis using VBA
- 8. Reading stock data live and creating portfolio return and variance using R for at least 10 stocks at a time.
- 9. Markowitz efficient frontier for the above stocks & Animation in R.
- 10. Integrating R functions with Excel without any alteration
- 11. Building Dashboard for Ratio analysis Dupont Chart
- 12. Corporate Valuation Models
- 13. Montecarlo Simulation
- 14. Automation using AI tools in R

#### Prerequisites:

- 1. Interested Faculty members should have basic skills in Excel and of course teaching Finance. Familiarity with VBA, R and Al is not essential.
- 2. Should have willingness and time to practice (daily during the course period) so as to internalise the skills and become effective and organised in using the skills learnt.

# Fees:

A nominal fee of  $\gtrless$  2500/- per participant to be remitted to the bank account as per the details below:

Name of Bank	Canara Bank
SB Account No.	2351101005980
Branch	Puttaparthi
IFSC	CNRB0002351

Important: The proof of remittance must be uploaded in the Registration form.

#### Registration: <u>https://forms.gle/WZfw8r7oGpuSbADi6</u>

Last date to apply - 30.04.2024

To register, please use only your official email address from your B-school, college, or university. Admission will be on a firstcome, first-served basis. Once our target of approximately 50 participants is reached, registration will be closed. A WhatsApp group for convenient communication will be established later.

# About SSSIHL

Sri Sathya Sai Institute of Higher Learning (Deemed to be University), Prasanthi Nilayam, Andhra Pradesh, India, is a visible manifestation of our Founder Chancellor Bhagawan Sri Sathya Sai Baba's vision of "Education for Human Transformation" providing quality education, free for all students irrespective of income, religion, or region through open admissions policy.

#### Sri Sathya Sai Values-based Integral Education

Sri Sathya Sai System of Integral Education system is a modern, rational, and scientific education system rooted in Indian ethos. It takes the best of both ancient and contemporary learning techniques. These dimensions are Intellectual, Physical, Cultural, Spiritual, and Service. The key activities for each of these dimensions form the basis of the time spent by students at SSSIHL.

#### A Modern Gurukula

Founded in 1981 to inculcate ethical and moral values in students along with regular secular education, this transformation has been the guiding principle right from the inception of SSSIHL. The institute provides students with a holistic framework of interpersonal development, combined with academic and research excellence. Its residential character trains the student's mind, body, and spirit in an environment similar to the ancient Indian 'Gurukula' system of education, in the most modern context.

The Institute hosts students from across the country for its undergraduate, postgraduate, professional, and research programmes across its four campuses - The Women's campus at Anantapur, Andhra Pradesh, and three men's campuses Prasanthi Nilayam Campus, Puttaparthi, Andhra Pradesh; the Brindavan Campus, Kadugodi, Bangalore, Karnataka, and the Muddenahalli Campus, Karnataka.

Visit us at: sssihl.edu.in



# Last date to apply - 30.04.2024 Register Now: <u>https://forms.gle/WZfw8r7oGpuSbADi6</u>

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