



FIMCIR/2026-27/05

May 14, 2026

To All FIMMDA Members / Non-Members

Dear Sir/Madam,

Training Program – Advanced Modeling and Valuation for Interest Rate Derivatives
July 02-03, 2026 (In Person)

At FIMMDA, we strongly believe that continuous learning and professional development are essential for strengthening both individual capabilities and institutional excellence. In line with this commitment, we are pleased to announce our upcoming in-person training program on:

“Advanced Modeling and Valuation for Interest Rate Derivatives”

Date: July 02-03, 2026

About the Program

The program has been designed to provide participants with practical and analytical insights into interest rate products, valuation methodologies, risk sensitivities, curve construction techniques, and derivative applications used in modern fixed income markets.

The sessions will combine conceptual understanding with market-oriented case studies, valuation exercises, and practical applications relevant to treasury and fixed income functions. The program aims to provide a practitioner’s perspective on commonly observed products in the marketplace.

Key areas proposed to be covered include:

- Construction and features of various interest rate derivative products
- Valuation methodologies and pricing approaches

- Scenario analysis and stress testing
- Computation of sensitivities / Greeks
- Quantification of market risk measures such as Value at Risk (VaR) and Expected Shortfall (ES)
- Practical applications through real-life case studies and worked-out examples

Target Audience

The program is intended for officials from:

- Front Office, Middle Office, Back office , Risk Management Department and other verticals of Fixed Income Trading Units of Banks, Financial Institutions, NBFCs, Insurance Companies and Primary Dealers.
- Internal Audit department dealing with treasury and fixed income operations.

Training Infrastructure:

The training venue of FIMMDA facilitates the learning process with the state-of-the-art infrastructure with modern age amenities like wi-fi, laptops, projector & audio-visual system. We accept a **maximum of 20 candidates on a first come first serve basis**. FIMMDA imparts training at a subsidized rate with Tea/Coffee Cookies and buffet lunch for the participants.

Please note that there is no option of cancelling the seats once they are booked for the training. If, for any reason, a nominee is unable to attend the said training, the nominating institution can replace another candidate so that the resources are not wasted.

Applicants may attend the training program only after receipt of confirmation of registration from FIMMDA.

The brief details of the program are as under :

Program title :	Advanced Modeling and Valuation for Interest Rate Derivatives
Course Fee :	Members: Rs. 20,000 + 18% (GST) Rs. 3600 = Rs. 23,600 Non-Members : Rs. 25,000 + 18% (GST) Rs. 4500 = Rs. 29,500/-
Date :	July 02-03, 2026 (Thursday - Friday)

Faculty:	The training sessions would be conducted by experienced faculty.
Timing :	10.30 am to 05.30 pm including lunch break
Venue :	Fixed Income Money Market and Derivatives Association of India Unit No 12 A-10, 13th Floor, Parinee Crescenzo, Plot C-38 & 39, G-Block, Bandra Kurla Complex, Bandra East, Mumbai-400051.
Training coordinator:	Ms. Shiraz Daruwala
For nomination and further details, please contact	Ms. Shiraz Daruwala 9930998818 Ms. Sulata Sharma 8104545957
E-mail Id	training@fimmda.org

We look forward to receiving a positive response and nominations for this Training Program on “Advanced Modeling and Valuation for Interest Rate Derivatives”, which is expected to significantly enhance the knowledge, analytical capabilities, and professional skills of the participants for the benefit of their respective institutions.

Yours faithfully,

Sd/-

G. Ravindranath
Chief Executive Officer

Encl: 1. Registration Form
2. Annexure I- Course Content

REGISTRATION FORM

**Advanced Modeling and Valuation for Interest Rate Derivatives
July 02-03, 2026**

Organization:

Office Address:

Telephone Number:

Fax Number:

Name of Participant/Designation	Department	Mobile No	E-mail ID

AUTHORISED SIGNATORY: _____

Date:

UTR NO:

Date:

Offline	Online	
Cheque /Demand Draft in Favor of "FIMMDA"	Account No	34528749367
	Name of Bank & Address	State Bank Of India, BKC Branch, Mumbai - 400051
	IFSC CODE	SBIN0004380

Payment to be made along with registration form

COURSE CONTENT

Day 1:

Module name	Module details
Rate equivalence under compounding frequency transformations	<ul style="list-style-type: none"> - Role of interest rate compounding frequency and affiliated use cases - Finding an equivalent rate of interest under annually / semi-annually / quarterly / monthly compounding frequency to continuous time framework
First order and second order IR sensitivity measures	<ul style="list-style-type: none"> - Cash flow discounting in a standardized / non-standardized setup - Modified Duration (MD) - first derivative of an IR instrument price w.r.t. yield - Convexity - second derivative of an IR instrument price w.r.t. yield
Applying Taylor series in fixed income markets	<ul style="list-style-type: none"> - What's Taylor series and how it is practically applied in fixed income markets - Performing MD and Convexity based attribution analysis of the change in bond price through given interest rate shift scenarios
Interest rate curve construction and its vital role in handling derivatives	<ul style="list-style-type: none"> - Analysis of the notion of zero rates / discount factors / forward rates in the sovereign context - What is meant by bootstrapping / IR curve construction (IRCC) and how it is performed - Overview of the recent transition from IBOR to RFR regime for key currencies
Use cases for bootstrapping the market observed IR curves	<ul style="list-style-type: none"> - Deriving zero rates / discount factors / forward rates from a par sovereign bond yield curve - Deriving zero rates / discount factors / forward rates from a par INR OIS and USD SOFR curve
Applying cubic / quartic spline based techniques for interpolation	<ul style="list-style-type: none"> - Need for finding missing tenor smooth interest rate quotes by means of polynomials - Algebraic representation of a cubic / quartic spline in the IR market context - Applying Matrix Algebra to solve for unknown coefficients to generate smoothened rate quotes
IR FRA and IRF - critical nuances	<ul style="list-style-type: none"> - Trade analysis of IR Forward Rate Agreement (FRA) and IR Futures (IRF) - MtM valuation case study for IR FRA and IRF - IR risk associated with IR FRA and IRF evaluated through PV01 / MD

Day 2:

<p>Bond FRA and bond future - critical nuances</p>	<ul style="list-style-type: none"> - Trade analysis of bond FRA and bond future - MtM valuation case study for bond FRA and bond future - IR risk associated with bond FRA and bond future evaluated through PV01 / MD
<p>INR OIS and USD SOFR swap - critical nuances</p>	<ul style="list-style-type: none"> - Trade analysis of an INR OIS and USD SOFR swap - MtM valuation case study for an INR OIS and USD SOFR swap - IR risk associated with an INR OIS and USD SOFR swap evaluated through PV01 / MD
<p>IR volatility cubes</p>	<ul style="list-style-type: none"> - Cap / Floor and Swaption based IR volatility cubes - Implied volatility computation from the quoted volatility cubes - Using bi-cubic / bi-quartic spline techniques for implied volatility estimation in practice
<p>IR caps and floors</p>	<ul style="list-style-type: none"> - Genesis of Black's model for products with IR optionality - IR cap / floor- trade analysis / attributes, performing MtM valuation and risk analysis - When and why to use IR cap / floor instead of IR FRA
<p>IR swaptions</p>	<ul style="list-style-type: none"> - How is IR swaption different compared to forward starting swap - Adaptations to be made to the Black's foundation model for IR swaption - IR swaption - trade analysis / attributes, performing MtM valuation and risk analysis - Specific purposes served by IR swaption and cautions around modeling assumptions
<p>Binomial tree techniques and key interest rate models in IR markets</p>	<ul style="list-style-type: none"> - Challenges associated with pricing early exercise option (American) feature - Binomial tree construct and backward propagation mechanism for option valuation - Ho-Lee Model: basic construct, key features and shortcomings (binomial tree calibration for the model) - Hull White One Factor Model: basic construct, key features and shortcomings - Black Derman Toy (BDT) model: basic construct, key features and shortcomings
<p>Limits and market risk management in practice in IR markets</p>	<ul style="list-style-type: none"> - Exposure and risk-based limits for MM / FI products and IR derivatives - Historical simulation-based Value at Risk (VaR) / Expected Shortfall (ES) computation for a bond position - Scenario occurrence probability assignment based on equal weights and exponential decay process