



JAI HIND COLLEGE

Basantsingh Institute of Science & J.T. Lalvani Institute of Commerce
and Sheila Gopal Raheja College of Management (Empowered Autonomous)

Bachelors In Actuarial Science & Quantitative Finance

BAQF

*A Premier Interdisciplinary Program for Careers in Finance,
Analytics, Risk Management and Actuaries.*

COURSE BROCHURE



**IFoA's President Paul Sweeting
recently visited Jai Hind College
to Interact with BAQF students**



About the PROGRAM

The Bachelors in Actuarial Science & Quantitative Finance (BAQF) is an interdisciplinary undergraduate program designed to prepare students for careers in finance, analytics, risk management, insurance and related domains. The key features involve integration of quantitative reasoning with core financial concepts to enable solving real-world challenges in the financial, banking and insurance sectors.



Who Should Pursue BAQF?

Anyone with a strong aptitude for logical reasoning, analytical mindset and mathematical abilities

Exclusive Partnership Benefit



CFA Institute

Gives You
A GLOBAL CERTIFICATION.

We Make It FREE.



The **Investment Foundations Certificate** is an internationally recognised credential offered by the CFA Institute, the global gold standard in finance and investment.

Professionals across the world pay **USD 350** to earn it.

As a BAQF student at **Jai Hind College**, you receive it at **NO COST** whatsoever.

This is not a discount. This is a full, formal partnership between



CFA Institute

Jai Hind College and the CFA Institute

one of the most prestigious institutions in global finance.

WORTH \$350. YOURS FROM DAY ONE.

Engagement with the Institute and Faculty of Actuaries (IFoA)



Paul Sweeting: IFoA President and IFoA Global President, engaging with our students.



Vikas Newatia: South Asia Lead for the IFoA, delivering an inspiring and insightful lecture.

PROGRAM GOALS



Develop expertise in actuarial science and quantitative finance for resolving financial and risk management challenges.



Foster adaptability with emerging technologies like data science, AI, and fintech in financial contexts.



Enhance analytical and problem-solving skills using mathematical and statistical methods.



Promote data-driven decision-making and proactive risk assessment in the financial and insurance sectors.



Develop strategic and leadership potential through experiential learning.



Master business writing, professional communication for documentation and stakeholder engagement.



What You'll Gain

Build an integrated skill set to excel in academic and professional certifications.



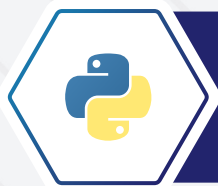
Excel & VBA

Financial Modelling
& Valuation



R Programming

Statistical &
Actuarial Analysis



Python

Data Analytics
& Automation



SQL

Database Querying
& Management



Bloomberg Terminal

Market Data &
Investment Research



Power BI

Interactive Data
Visualization



Risk Management

Risk Assessment
& Management



Team Collaboration

Professional
Communication

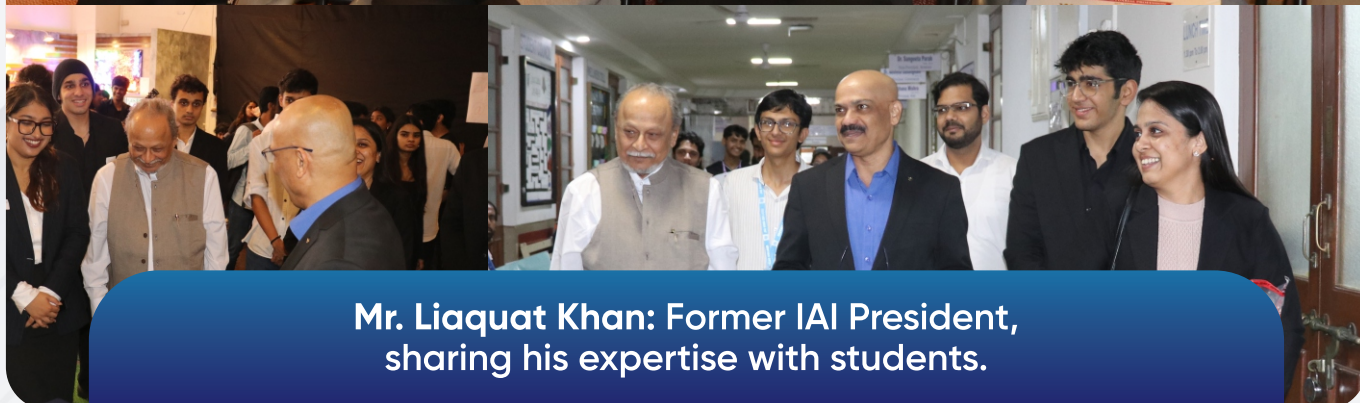


Research Skills

Financial &
Actuarial Research



Expert Interaction & Industry Insights



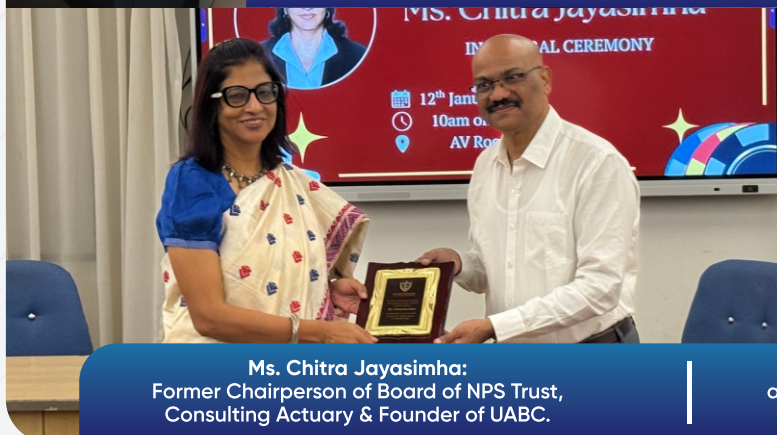
Mr. Liaquat Khan: Former IAI President,
sharing his expertise with students.



Mr. Hariharan Mani Managing Director, PwC AIMS India,
engaging directly with the students.



Craig Travasso: Communication Coach
and Corporate Trainer, actively engaging and
interacting with the students.



Ms. Chitra Jayasimha:
Former Chairperson of Board of NPS Trust,
Consulting Actuary & Founder of UABC.

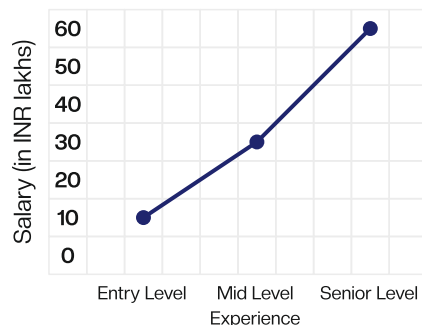
Actuarial Science

Actuarial Science is a specialised field that applies mathematical and statistical models to evaluate financial risks in banking, investments, insurance, pension funds, and other industries.

Scope

- India will require over 25,000 new actuaries by 2030, with global demand projected to grow by 300%.
- Top recruiters include: EY, Pwc, Deloitte, Swiss Re, Milliman, JP Morgan, Goldman Sachs, ICICI Lombard and other global leaders in banking, insurance, consulting, and financial services.

Growth Curve



Actuarial Salary Progression

Exam Session	Year	Subject
April 2027	1	CS1 + CB2
Sept 2027	2	CB1 + CB3
April 2028	2	CM2
Sept 2028	3	CP2
April 2029	3	CS2
Sept 2029	4	CP1 + CM1

Proposed timeline for clearing actuarial papers in course of our BAQF program.

Graduates typically begin their careers as Actuarial or Risk Analysts moving further towards positions such as Appointed Actuary, Chief Risk Officer or Consultants.

In India, the actuarial profession is governed by the Institute of Actuaries of India (IAI) and globally by bodies like the Institute and Faculty of Actuaries (IFoA), UK.

To become a fully qualified actuary with either body, a student must clear a total of 13 professional exams.

Our BAQF program is carefully curated to cover 100% academic content of 9 out of the 13 exams.

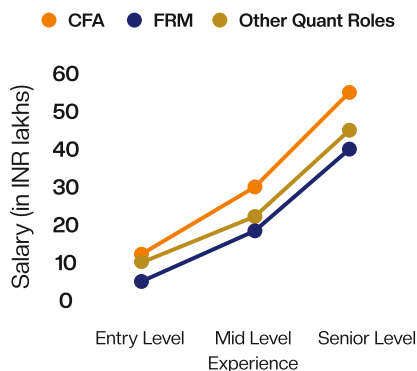
Quantitative Finance

Quantitative Finance combines mathematics, statistics, and computational tools to model financial markets, optimise investments, and manage risk in global financial systems.

Scope

- India will require over 1.5–2 lakh new professionals in Quantitative Finance, Risk, and Analytics by 2030, with global demand projected to grow 25%+ in the next 5 years.
- Top recruiters include Goldman Sachs, JPMorgan, BlackRock, Citibank, Axis AMC, and leading global investment firms and hedge funds. banking, insurance, consulting, and financial services.

Growth Curve



Salary Trajectory Across Quant Roles

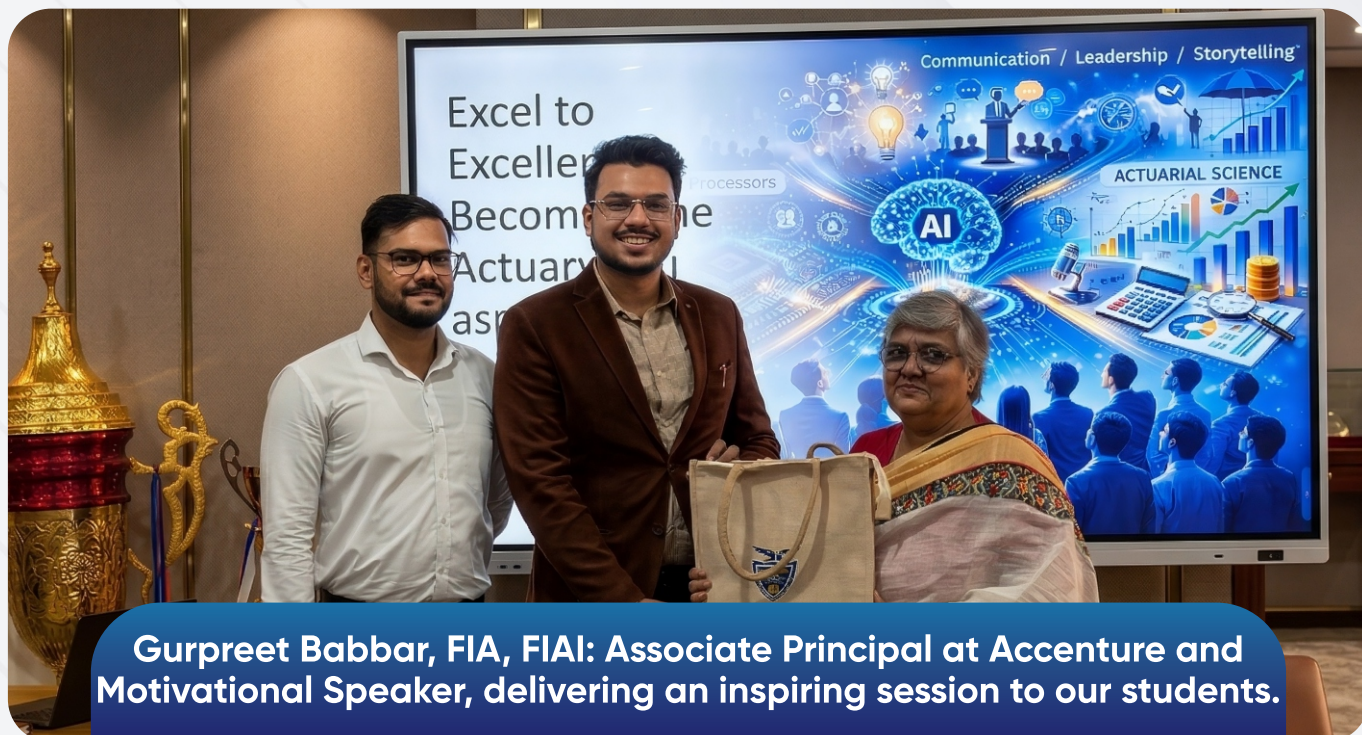
Exam Session	Year	Certification
May 2028	2	CFA Level 1
May 2029	3	CFA Level 2 / FRM Part 1
Nov 2029	4	FRM Part 2 / CFA Level 3

Proposed Timeline for CFA and FRM Exams in the course of our BAQF program

Graduates begin as Quant Analysts, Investment Analysts, or Risk Analysts, progressing to roles like Portfolio Manager, Quant Strategist, or Chief Investment Officer.

The Quantitative Finance track is academically mapped to CFA® and FRM® certifications—global benchmarks in finance and risk management.

Students gain deep exposure to core topics across all 3 CFA levels and both parts of FRM, covering up to 99% of the syllabi, empowering them to attempt these qualifications during the course of the program.



Teaching-Learning Strategy



Expert-Led Interactive Learning

Judicious integration of interactive lecture sessions by expert faculty and industry professionals with hands-on training through simulations, case studies, and real-world projects.



Flipped Classroom Model

Use of the flipped classroom model maximises engagement with foundational content online, reserving in-person sessions for discussions, problem-solving, and collaborative teamwork.



Practical Exposure & Tools

Field visits, mentorship programs, and tools like R, Python, and Excel VBA through coding and software BootCamp ensure practical mastery.



Research & Innovation

Continuous feedback and research-driven capstone projects cultivate critical thinking and innovative ideas essentials for mastery in actuarial science and quant analysis.

Semester-wise Curriculum Overview

The BAQF program follows a structured semester-wise progression in alignment with NEP 2020.

Semester 1

- 1. Fundamentals of Finance
- 2. Economic Principles and Market Dynamics
- 3. Principles of Corporate Finance and Governance
- 4. Fundamentals of Statistics and Probability
- 5. Mathematical Foundations for Quantitative Analysis
- 6. Introduction to Basic Excel
- 7. Introduction to R Programming and Python
- 8. General Communication

Semester 2

- 1. Essentials of Quantitative Finance
- 2. Inference and Credibility Analysis
- 3. Macroeconomic Analysis
- 4. Corporate Financial Insight
- 5. Business Management
- 6. Advanced Excel with VBA
- 7. Statistical Computing with R
- 8. Business Communication
- 9. Ethics & Professionalism

Semester 3

1. Asset-Liability Management and Valuation
2. Introduction to Risk Management and Uncertainty
3. Behavioral Finance and Investment Decision-Making
4. Portfolio Management and Wealth Optimization
5. Financial Regulation and Compliance
6. Financial Modeling with Excel
7. Communication Skills - I
8. Co-Curricular Course
9. Project Work

Semester 4

1. Derivatives and Financial Instruments
2. Advanced Risk Management Techniques
3. Investment Banking and Capital Markets
4. Strategic Portfolio Management
5. Financial Engineering in Excel
6. Model Documentation and Reporting Standards
7. Machine Learning for Financial Applications
8. Communication Skills - II
9. Community Engagement

Semester 5

Specialisation in Actuarial Science

1. Life Contingencies and Actuarial Mathematics
2. Advanced Statistical Modeling for Insurance
3. Statistical Methods for Actuarial Science
4. Actuarial Risk Management and Solvency
5. Advanced Ethics & Governance in Finance & Insurance
6. Excel Applications in Actuarial Science
7. Internship

OR

Semester 5

Specialisation in Quantitative Finance

1. Mergers, Acquisitions, and Corporate Restructuring
2. Portfolio Optimization and Risk Management
3. Time Series Analysis for Financial Markets
4. Quantitative Risk Management for Finance
5. Advanced Ethics & Governance in Finance & Insurance
6. Alternative Investments and Hedge Fund Strategies
7. Communication Skills - I

Semester 6

Specialisation in Actuarial Science

1. Advanced Life Contingencies
2. Stochastic Processes in Actuarial Science
3. Survival Analysis and Mortality Modeling
4. Financial Analysis for Actuarial Practice
5. Excel Applications in Actuarial Science
6. R Programming for Actuarial Data Analysis
7. Project Work

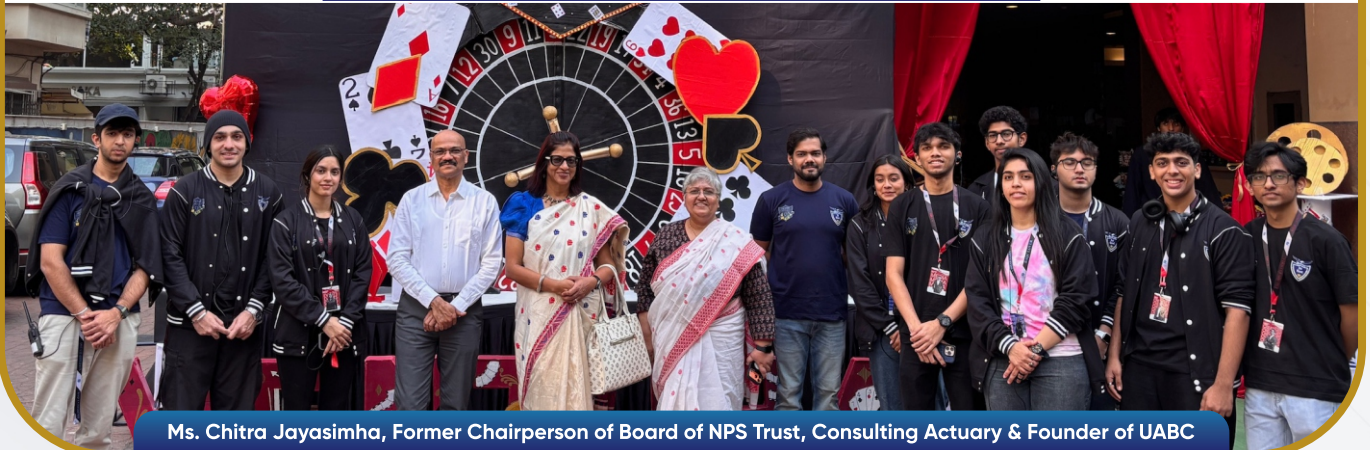
OR

Semester 6

Specialisation in Quantitative Finance

1. Financial Engineering and Derivatives Strategies
2. Global Financial Markets and Currency Risk
3. Behavioral Finance and Wealth Management
4. Financial Statement Analysis for Investment
5. Advanced Programming for Financial Data Analysis
6. Python & SQL
7. Project Work

Beyond Beyond the Classroom



Advisors & Mentors



Prof (Dr) Sankarshan Basu

Professor of finance and accounting at the IIM Bangalore,
PhD in statistics from the LSE, UK and
an M.Sc. in statistics from the IIT, Kanpur, India.



Chitra Jayasimha

Fellow Actuary, Gold Medalist in Statistics, Chairperson of
NPS Trust and Founder of Universal Actuaries;
formerly held leadership roles at Aon Hewitt, Mercer, Swiss
Re, and ING Vysya



Vamsidhar Ambatipudi

Fellow Actuary, FRM, MBA (IIM Indore),
Computer Science Graduate, Professor at
BITS Pilani (WILP)



Dr. Vijay Tiwari

PhD in Mathematics; Assistant Professor
and BAQF Program Coordinator at Jai
Hind College.



Rushabh Shethiya

Fellow Actuary, CFA Level III, LLB
(Government Law College); formerly
worked at PWC, EY and WTW



Yash Prahladka

Fellow Actuary, CFA Charterholder,
Manager at SBI Life, Formerly worked at
ICICI Prudential.

Advisors & Mentors



Aditya Bagdia

Research Analyst at Buoyant Capital,
CA, CFA and FRM



Ronak Sharma

MBA, Asst. Vice President at TransUnion CIBIL Limited,
Expert in Fraud & Risk Mitigation,
Forensic Analytics & Regulatory Compliance



Dr. Richa Kothari

Semi Qualified Actuary, PhD in Economics, Asst. Professor at
IILM, formerly worked at Bhawanipur Education Society and
Presidency University.



Gajanan Kharche

Senior Actuarial professional, B.E. (IT);
formerly worked with Swiss Re as Asst
VP and WNS Global as Group Manager



Tanvee Dedhia

Semi-Qualified Actuary, Analyst at
WTW, Formerly worked with Marsh
McLennan

Career Sectors

Investment Banking and
Portfolio Management

Asset and
Wealth Management

Credit Rating
and Treasury

Consulting
and Analytics

Health, Life and
General Insurance

Reinsurance and
Pension Funds

Regulatory and
Policy Institutions

Fintech and
Innovation

Potential Recruiters & Industry Exposure

J.P.Morgan

Goldman
Sachs

KPMG



citi

SBI



Principal®

AIG



S&P Global

Mercer



AON

Morgan Stanley



FUTURE
GENERALI
TOTAL INSURANCE SOLUTIONS

Deloitte.

McKinsey
& Company



Infosys



accenture

BCG

WNS

CREDIT SUISSE
BlackRock®



Q.1

Is this course only for those pursuing Actuarial exams?

No. BAQF supports CFA and FRM aspirants as well.

Q.2

Can I attempt CFA/FRM while in college?

Yes. The structure allows time for certification prep.

Q.3

Is prior programming knowledge needed?

No. Programming tools are taught from the basics.

Q.4

Will I be placement-ready after graduation?

Yes. The program includes internships, projects, and job readiness training apart from placement support.

Q.5

What are the eligibility criteria?

Class XII with Math/Stats. Jai Hind CEE + Interview.

Q.6

What is the level of math required?

Comfort with school-level math and logical reasoning is essential. The course progressively builds complexity.

Q.7

Is the course open to students from Arts or Commerce background?

Students must have taken Mathematics or Statistics in Class 12, irrespective of stream.

Q.8

Will I get support for applying to international universities after graduation?

Yes. Faculty mentors and the placement cell guide students on applications, SOPs, and recommendation letters.

Q.9

Can I pursue higher studies abroad after BAQF?

Absolutely. The curriculum provides a strong foundation for Msc, MFE, or MBA programs globally.

ADMISSION OPEN

FOR ACADEMIC YEAR 2026-27

Applicants must have completed Class XII with Mathematics or Statistics. Selection is based on performance in the Jai Hind College Common Entrance Exam (JHC-CEE) and class 12th Mathematics and/or Statistics Score



What Students Say



Vidush Jain

This program blends actuarial science with CFA and FRM concepts in a highly practical, industry-oriented way. The experienced faculty and regular sessions by professionals provide valuable real-world insights. Overall, it's a highly enriching and career-focused program.



Kazim Shroff

The BAQF (BSc Actuarial Science and Quantitative Finance) course at Jai Hind College is a strong and promising program. As part of the first batch, my experience has been enriching. Overall, it has provided a solid foundation and valuable learning.



For more details and to apply:

- ➔ Register for the Entrance Exam
- ➔ View Entrance Exam Notice (PDF)
- ➔ More about the BAQF Program

VISIT OUR CAMPUS



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Churchgate, Mumbai - 400020**



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www.jaihindcollege.com

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