

B.Sc. in Actuarial Science & Quantitative Finance

3 years, Full - time

India's Only Degree Program to be accredited by IFoA for Exemptions



Institute
and Faculty
of Actuaries

+91 9372777615

| actuarialscience@patkarvardecollege.edu.in

Actuarial Science

Actuaries are the first professionals managing risk and modelling the financial impact based on the likelihood of future scenarios.

Actuaries are experts in:

- Evaluating the likelihood of future events - using numbers, not crystal balls.
- Designing creative ways to reduce the likelihood of undesirable events.
- Decreasing the impact of undesirable events that do occur.

actuaries are among **TOP 25** Highest Paid Professionals

only **439** actuaries in India

#11 200 jobs

Data Science

Large amount of data is generated by, and available to business and organisations. The ability to take data, to be able to understand it, to process it, to extract value from it, to visualize it, to communicate it sums up the role of a data scientist in the simplest of terms.

Data Science converts crude data into meaningful products that can be used by industries to generate insights and recognize market trends. With a dearth in the supply of specialized Data Scientists and a rapid increase in demand, this stands as a great career choice for students.

IBM Predicts demand growth **28%** by 2020

experience over 5+yrs. **₹75** Lacs annum

Quantitative Finance

The financial engineers (Quant Analyst) are specialists making use of mathematical formulas, programming and engineering methods in financial theories, and analyses market trends to build data-backed financial models.

The primary responsibility of a financial engineer/ Quant Analyst is to have thorough knowledge of financial markets, its volatility and knowledge of financial theories.

As a financial engineer/ Quant Analyst, you can associate yourself as an employee of any reputed financial institution or setup your own consultancy or do both.

Compliments Finance - Based Courses



CFA



FRM



CAIA

Education is not the learning of facts,
but training of the mind to think.

-Albert Einstein

HOW WILL IT HELP ?

The **3-Year, Full Time, B.Sc. (Actuarial Science & Quantitative Finance)** degree program offered by Patkar Varde College, University of Mumbai, provides a complete solution to the various issues faced by an actuarial aspirant in India. It not only equips students with the relevant technical skills but also focuses on holistic development.

India's Only Degree Program to be accredited by IFoA for Exemptions

Offers exemptions for upto 6 Actuarial Papers



Exemptions

B.Sc. (Actuarial Science & Quantitative Finance) is currently the only undergraduate program in India that offers exemptions for up to 6 of the IFoA Core Principle subjects - (CM1, CM2, CS1, CS2, CB1 and CB2).

Graduates from the programme who meet the IFoA's exemption threshold in the relevant university subjects will be eligible for exemption from the corresponding IFoA subjects and will not need to sit the IFoA exam for those subjects.

University of Mumbai



University of Mumbai Degree

The program is offered by **Patkar-Varde College**, affiliated to the **University of Mumbai**, thus making it a **globally recognised degree**. Being located in the heart of Mumbai - the Financial Capital of India, the college is at a good reach of several top corporates.

About IAQS

Founded in 2018, IAQS is a premier education institute helping students to pursue Actuarial Science and Quantitative Finance studies. The institute is affiliated with University of Mumbai and Patkar Varde College, Goregaon in offering the Bachelors and Masters program.

We curated a degree which is a unique blend of actuarial and quant finance keeping in mind their growing interdependencies. Recent years have seen a huge upsurge in the need of statistical knowledge in the financial arena and at the same time growing actuarial opportunities in the quant finance domain.

With the changing job dynamics and opportunities, its vital for students to back their careers with some professional degree. With a deep industry experience and a flair in training aspirants, we offer students a platform to pursue various professional degrees through the formal education route.

Key Highlights



ELIGIBILITY:

- 10 + 2 years of education from any stream
- Cleared QAT/ ACET/ any actuarial paper and Personal Interview



QAT:

- MCQs based test on Math, Stats and English



COMPLIMENTS PROFESSIONAL COURSES:

- Actuarial Science, CFA, FRM, CAIA via formal education system



FACULTY:

- Industry Experts and Academicians
- 40+ Years of Cumulative Experience



PRACTICAL LEARNING:

- Capstone projects, Job-oriented training, Industry connect



PLACEMENT CELL:

- Guidance for future career
- Resume building
- 100% Job Placement Assistance



L.M.S

- Revisit, Rethink and Revise lectures anywhere, anytime



GLOBAL REACH:

- International tie-ups and internship opportunities



CAMPUS:

- Situated at the heart of Mumbai
- Co- curricular and Extra-curricular activities



JOB-READY:

- Platform enabling students to take lucrative career paths



At IAQS, our courses have been developed to sync education with industry realities, compliment professional qualifications and designed to impart knowledge coupled with holistic development.

- Akash Rughani
Program Director

Advisory Board



Thomas Mathew T

Board of Director (L&T group of companies, LIC of India, Canara HSBC OBC, L.I.C Ltd.)

- Former Chairman-in-charge & MD of LIC of India.
- Ex member - Panel of experts (Ministry of Finance, Govt. of India)
- Ex member - Quality review board (Institute of Actuaries of India)



Nilesh Shah

Managing Director at Kotak Mahindra AMC Ltd, Chairman: Association of Mutual Funds in India, Member at Prime Minister's Economic Advisory Council

- Ex MD CEO - Axis Capital Ltd.
- Ex Chief Investment Officer - ICiC Prudential AMC Ltd. & Franklin Templeton India.



JV Prasad

Director, Willis Towers Watson

- Ex Appointed Actuary & Vice - President - ICIC Lombard GIC
- Ex CRISIL - Structured finance Ratings.



Sauvik Banerjee

Digital Technology leader - Tata Group

- Ex VP Tata Industries, CTO TataCLiQ, SAP, Accenture, Infosys, Netsuite Author, Tedx Speaker, MIT starter hub mentor.



Pratibha Jain

Founder & Managing Director, Eduabroad Consultant.

- Education Counsellor, Mumbai University affiliated colleges.



Rajesh Khairajani

Partner - KNAV International, Partner - Inde Global Advisory

- Valuation expert, Speaker at Indo American Chamber of Commerce & NASSCOM
- Candidate of the American Society of Appraisers.



D Sivanandhan

Board of Directors on Various Companies, IPS Officer (Retd.), Ex Commissioner of Police

- Ex member - Central Security Cell (Reserve Bank Of India Panel)
- Ex member - Special task force, National Security Council (Prime Minister's Office).
- Recipient of the President's Distinguished Service Medal.



INSTITUTE OF ACTUARIAL
& QUANTITATIVE STUDIES



All India Institute of Local Self Government (AII LSG)
Sthanikraj Bhavan, C. D. Barfiwala Marg, Juhu Gali,
Andheri (West), Mumbai - 400 058.

Patkar-Varde College
S. V. Road, Piramal Nagar,
Goregaon (West), Mumbai - 400062.



+91 9372777615



www.iaqs.in



info@iaqs.in



B. Sc. (Actuarial Science & Quantitative Finance)

Meet Entry Requirement

Semester 1

- Calculus
- Financial Mathematics
- Business Finance -1
- Probability & Statistics -1
- Applications of IT - Basics of Excel
- Life Insurance - Principles, Products & Practices

Semester 2

- Numerical methods & Algebra
- Probability & Statistics
- Business Finance -2
- Introduction to Actuarial Models
- Non-Life Insurance - Principles, Products & Practices
- Basics of R

Semester 3

- Statistical & Risk Modelling - 1
- Portfolio Theory & Security Analysis
- Project Work - 1
- Applications of IT - Basics of Python
- Business Economics - Micro Economics
- Introduction to Derivatives & Financial Markets

Semester 4

- Statistical & Risk Modelling -2
- Financial Engineering - 1
- Fixed Income Products
- Business Economics - Macro Economics
- Statistical Models in R
- Advance Application Excel

Mandatory Internship

Choose your elective for Specialization

Semester 5

- Professional Ethics/Actuarial Practice standards
- Business Communication
- Model Documentation, Analysis & Reporting
- Elective A:** • Pricing & Reserving for Life Insurance Products - 1
- Statistical & Risk Modeling - 3
- Elective B:** • Financial Engineering - 2
- Risk Management & Investment Management - 1

Semester 6

- Predictive Analytics & Machine Learning
- Psychology of human behaviour at work
- Application on Bloomberg Terminal or Similar Software
- Project Work - 2 / C++
- Elective A:** • Pricing & Reserving for Life Insurance Products -2
- Statistical & Risk Modeling -4
- Elective B:** • BASEL
- Risk Management & Investment Management -2

Congratulations! You are a Graduate

Frequently Asked Questions (FAQs)

How does the B.Sc. - Actuarial Science and Quantitative Finance compare with the other graduation or diploma programs?

- Focus on industry integrated learning, by having > 60% of industry practitioners as our teaching faculty.
- Students get a chance to interact with CEOs, Senior Management and Industry experts exposing them industry realities.
- Hands on experience with new-age business analytical tools such as Python, Bloomberg Terminal, R, Advance Excel, etc.
- Solid foundation to pursue post-graduation in fields like Financial Engineering, Economics, Statistics, Big Data Analytics, Actuarial Management, etc.

Which all professional exams can one opt for over the period of this course?

	Actuarial Science (IFoA, IAI)	Quantitative Finance
End of Year 1	CS 1, CB 1	
End of Year 2	CM 2, CB 2	
End of Year 3	CS 2*, CM 1*, CP 2	CFA Level 1& 2, FRM

*if opted for Actuarial elective

About QAT

Online entrance exam covering the following subjects:

- Maths + Stats (70% weightage)
- English (30% weightage)

Visit our website for the topics covered in the aforesaid subjects.

- Test is mandatory unless you have cleared ACET or any actuarial paper
- 100 marks test of 2 hours consisting of 70 multiple - choice questions
- Incorrect answers will result in 25% negative marking

What career opportunities does the B.Sc. - Actuarial Science and Quantitative Finance program open up to?

This one of a kind degree aims at providing students various career opportunities like:

- Investment Banking
- Data Science
- Actuarial Science
- Risk Modelling
- Equity Research
- Asset - Liability Management
- Financial Analysis

Fee Structure:

For B.Sc. - Actuarial and Quantitative Finance:
₹ 99,313 per Semester

Fees includes tuition fee, library fee, exam fee, university charges, study material fee and industry training fee.

As a part of our continuous encouragement to students to pursue professional qualification along with the program, there are Scholarship facilities available for the students.

Note: Since the program comes under UGC approved university degree program, it is treated under the preferential education loan category. For further details, please contact the course admin team.

Follow us on our Social Media handles by clicking on the icons below:

