

HSNC UNIVERSITY, MUMBAI

(A State Public University)



SCHOOL OF APPLIED SCIENCES

ADMISSIONS OPEN FOR

B.Sc in Actuarial Science & Finance

This programme is designed to equip students with **strong analytical, mathematical and statistical skills** essential for **assessing risk** and **making data-driven decisions** in industries such as insurance, banking, finance and consulting.

The programme incorporates hands-on training with tools like **R, Python, Excel, SQL** and various statistical software, preparing students for real-world applications. With expert faculty, state-of-the-art resources, and a strong focus on employability and global readiness, this course aims to develop future-ready actuaries who can thrive in dynamic and challenging professional environments.



ABOUT PROGRAMME



The **Bachelor's in Actuarial Science & Finance** programme is crafted to equip students for careers in finance, analytics, risk management, insurance, and related fields. It focuses on blending quantitative skills with fundamental financial principles to help students tackle real-world problems in the banking, financial services, and insurance industries.

HIGHLIGHTS

- Build strong foundations in actuarial science, finance, and risk management
- Apply mathematical and statistical tools to solve complex financial problems
- Gain exposure to data science, artificial intelligence, and fintech in real-world financial settings
- Develop critical thinking and data-driven decision-making capabilities
- Understand risk assessment frameworks across banking, insurance, and investment domains
- Engage in experiential learning to develop strategic insight and leadership acumen
- Learn effective business writing and professional communication for corporate environments
- Prepare for dynamic careers in
 - Analytics
 - Finance
 - Insurance and
 - Financial services industries

ABOUT PROGRAMME



Duration

3 Years

Fees

Rs. 2,43,850

Intake

60 Seats

Eligibility

12th standard with Science stream (other streams need to complete a bridging course to revise basic math modules).

Proficiency in English.

Career Prospects

- Actuarial Analyst
- Risk Analyst
- Data Analyst
- Financial Analyst
- Investment Banking or Wealth Management Associate
- Underwriter or Claims Analyst
- Business Intelligence or Strategy Analyst
- Compliance or Regulatory Affairs Executive
- Quantitative Analyst (Quant) in trading or analytics teams
- Postgraduate pathways in actuarial science, finance, economics, or data science



PROGRAMME CONTENT



Semester 1		
1	Financial Mathematics 1	
2	Applied Mathematics	
3	Applied Statistics 1	
4	Business Economics 1	
5	Written Communication	
6	Ethics & Professionalism	
7	Indian Knowledge System	
8	Co-curricular	

Semester 2		
1	Financial Mathematics 2	
2	R Programming	
3	Applied Statistics 2	
4	Business Economics 2	
5	Excel	
6	Spoken Communication	
7	Ethics and Professionalism	
8	Co-curricular	

PROGRAMME CONTENT



Semester 3		
1	Financial Engineering 1	
2	Risk Management 1	
3	Business Finance 1	
4	Psychology of Financial Decisions	
5	Python & SQL	
6	Modern Indian Language	
7	Co-curricular	

Semester 4		
1	Financial Mathematics 2	
2	Risk Management 2	
3	Business Finance 2	
4	Model Documentation & Reporting	
5	Financial Modelling in Excel	
6	Modern Indian Language	
7	Co-curricular	

PROGRAMME CONTENT



Semester 5			
1	Risk Management 3		
2	BFSI Regulations		
3	Advance Excel with VBA		
	(Specialisation: Actuarial Science)	(Specialisation: Finance)	
4	Life Contingency with Excel 1	Portfolio Management 1	
5	Statistical Modelling 1	Alternative Investments 1	
6	Stochastic & Survival Models	Business Finance 3	
7	Internship		

Semester 6		
1	Risk Management 4	
2	Predictive Analytics & Machine Learning	
	(Specialisation: Actuarial Science)	(Specialisation: Finance)
3	Life Contingency with Excel 2	Portfolio Management 2
4	Statistical Modelling 2	Alternative Investments 2
5	Advanced statistical application in R	Technical & Fundamental Analysis (using Bloomberg Terminal)
6	Industry Problems Case Study	

INFRASTRUCTURE















