

## COURSES

### Core Courses

Introduction to Mathematical Thinking  
Algebra I, Algebra II, Algebra III  
Analysis I, Analysis II, Analysis III  
Numerical Analysis  
Probability and Statistics  
Ordinary Differential Equations  
Number Theory and Cryptography  
Linear optimization and applications

### Elective Courses

Discrete Mathematics  
Lattices and Boolean Algebra  
Quantitative methods  
Mathematics for Computer Science  
Mathematical Finance  
Actuarial Mathematics  
Laplace Transforms and Fourier Series  
Advanced Algebra  
Partial Differential Equations  
Advanced Analysis  
Mathematical Modelling

**The medium of instruction is English**

## CAREERS

Students graduating with BA Honours in Mathematics can choose an academic career in Mathematics or an allied discipline. They can also pursue careers in finance or management, banking or insurance, software development or consultancy, Government, non governmental or corporate sector, media and publishing, among many others.

## HOSTEL

AUD has 45 seats for women in its hostel in Kashmere Gate.

## ADMISSIONS

Seats: 35 (Kashmere Gate campus)

## ELIGIBILITY

The candidate must have passed the class XII or an equivalent examination from a recognised Board and secured a minimum of 65% in Mathematics.

## SELECTION PROCEDURE

The selection will be on merit to be determined on the basis of marks obtained in the best four subjects including Mathematics and excluding any vocational subject. Meeting the eligibility criteria alone will not ensure admission, which will be strictly on the basis of merit as per the rules. Reservation norms of Government of NCT of Delhi will apply.

## FEES

Tuition Fees: Rs. 20000/- per semester  
Caution Deposit: Rs. 5000/- (One-time, Refundable)  
Student Welfare Fund: Rs. 500/- per semester

If a student opts for extra credits, an additional fee of Rs. 1250 per credit has to be paid.

\*Partial/full fee waiver and scholarships are available. Full waiver of tuition fees will be extended to students belonging to SC, ST and PwD categories.

## APPLICATION FEE

Rs.360 for general candidates  
Rs.140 for SC/ST/PwD

## ONLINE APPLICATION

21 May 2018 - 23 June 2018

## FIRST CUT-OFF

9 July 2018

## FOR FURTHER DETAILS

Visit: [www.aud.ac.in](http://www.aud.ac.in)  
Contact: +91-11-23863740, 23863743  
Mail: [kranti@aud.ac.in](mailto:kranti@aud.ac.in)  
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## BA HONOURS MATHEMATICS

2018-2021



**AMBEDKAR UNIVERSITY DELHI**  
CAMPUSES @ KARAMPURA |  
KASHMERE GATE | LODHI ROAD



## SCHOOL OF UNDERGRADUATE STUDIES (SUS)

The School of Undergraduate Studies (SUS) aims to offer its students a unique liberal arts education that acquaints them with diverse approaches to knowledge. The undergraduate programmes at AUD encourage students to think critically and creatively, to analyse and reason, to communicate effectively, and to draw evidence-based conclusions. It aims to achieve a balance between the range and depth of the subjects studied.

The unique aspect of Undergraduate programmes at AUD is that there are common modules for foundational skills comprising language, writing skills, communication skills, analytical reasoning and a core module in social sciences. This is done through a blend of common foundational courses, languages, core discipline courses and a wide range of elective courses. Students experience the flexibility of choosing courses from more than disciplinary area in order to develop a broader perspective on social sciences and humanities. They also have the opportunity to seek transfer from one programme to another, provided they meet certain criteria.

### Teaching Methods

The teaching method in AUD is interactive and learner centric. The pedagogy comprises of lectures, tutorials, lab classes, field work, workshops and seminars.

### Attendance Policy

The School of Undergraduate Studies follows a mandatory attendance policy. Students are expected to attend all learning situations. The penalties for low attendance are applied in the form of 'grade cuts' based on a sliding scale of attendance shortfall.

### Assessment

Assessment is continuous, with regular feedback. The aim of continuous assessment is to ensure that the work done during the semester carries more weight than a single end-semester examination.

### Medium of Instruction

The medium of instruction at AUD is English. The university provides a range of support systems for English language education through its Centre for English Language Education. Mentoring is an important feature of all programmes in AUD.

## BA (HONS) IN MATHEMATICS

An Honours programme in Mathematics at the Undergraduate level is one of the most versatile degrees in terms of skills, knowledge-base and career options. The BA Honours in Mathematics at AUD will provide the opportunity to develop all the above abilities and at the same time greatly enhance computational skills. The flexible framework of the credit-based semester system at AUD provides a perfect opportunity to build a strong foundation in modern Mathematics as well as ability to explore other disciplines. The core courses in Mathematics will cover abstract algebra, real analysis, numerical analysis, probability and statistics, differential equations, linear optimization, number theory and cryptography.

A wide variety of elective courses in Mathematics will cover topics like mathematical finance, actuarial mathematics, mathematics for computer sciences, discrete mathematics, advanced algebra, advanced analysis and mathematical modelling.

Computational skills and programming skills will be taught through extensive practical classes. Tutorials, lab sessions, workshops and seminars are some of the pedagogical hallmarks of the programme.

The Mathematics programme at AUD does not have a compulsory internship. However, students are encouraged to apply for internships that require a training in Mathematics in companies or in other reputed institutions. They are also encouraged to participate in summer schools and other programmes of mathematical nature.

A strong project component will seek to augment their understanding of the discipline and its many applications. Some of the Mathematics courses may also have this component.

The programme is delivered through a total number of 96 credits over six semesters. In order to receive a BA (Hons) degree in Mathematics, these credits must be earned in the following manner:

Courses	Minimum Credits
Compulsary Foundation Courses (Languages and Environmental Issues)	12
Foundation Optional Courses	4
Core Mathematics Courses	48
Others (Electives, Foundation, other discipline courses)	32