UNIVERSITAS GADJAH MADA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
MASTER OF MATHEMATICS STUDY PROGRAM

DEPARTMENT OF MATHEMATICS
http://matematika.fmipa.ugm.ac.id/

Master Program in Mathematics

Universitas Gadjah Mada
(since August 1992)

Achievement:

BAN-PT
(Unggul 5x)

ASIIN
(Full certified till 2029)

EMERGING REGIONAL CENTRE OF EXCELLENCE (ERCE) LABEL 2025-2028
EMS
EUROPEAN MATHEMATICAL SOCIETY

About the Program

Established in 1992, the Master of Mathematics Study Program at UGM is one of the best mathematics master's programs in Indonesia, offering advanced education in pure and applied mathematics. It is the largest in terms of the number of students and the diversity of concentrations offered.

Vision & Objective

The Master of Mathematics Study Program at UGM is committed to becoming an internationally competitive center of excellence, both in theory and application, to support the realization of social welfare. Serving as a bridge between undergraduate and doctoral studies, the program is designed to strengthen and refine the mathematical knowledge acquired at the undergraduate level, preparing graduates for careers that demand advanced mathematical skills and understanding.

Concentration

- Analysis
- Algebra & Combinatorics
- Applied Mathematics & Computation
- Statistics, Data Science & Actuarial Science

Career Opportunities

- Mathematics Researchers
- Lecturers
- Data Analysts
- Financial Experts
- Mathematical Consultants
- Many more!

The Curriculum

A. Regular Track (by Course Track)
Designed for students seeking a structured, coursework-based path. Students complete 44–50 credit units (CU), consisting of:
- 12 CU of core compulsory courses (Analysis I, Advanced Linear Algebra, Mathematical Statistics I, Mathematical Modelling & Computations),
- 9 CU in compulsory courses for the chosen concentration,
- 15–21 CU of free elective courses, and
- 8 CU for the final project (Thesis I & II).

B. By Research Track
Ideal for students with a focused research interest. The program pertains to the implementation of research-based postgraduate programs, with total of 44–50 CU, consisting of:
- 12 CU of core compulsory courses (Analysis I, Advanced Linear Algebra, Mathematical Statistics I, Mathematical Modelling & Computations),
- 3 CU free elective courses,
- 5 CU research work,
- 16–22 CU for publication, and
- 8 CU for the final project (Thesis I & II).

Graduation Requirements

- 44–50 total credits completed
- GPA ≥ 3.25 with no D or E grades
- Thesis I & II graded at least B
- TOEFL ≥ 450 (AcEPT 209), TPA/PAPS ≥ 500
- Approved thesis and publication
- Additional for Research Track: 1 accepted paper in a reputable international journal or two international proceedings

The Human Resources

Major in Analysis:
1. Prof. Atok Zulijanto, M.Si., Ph.D.
2. Prof. Dr. Supama, M.Si.
3. Prof. Dr. Ch. Rini Indrati, M.Si.
4. Dewi Kartika Sari, S.Si., M.Sc., Ph.D.
5. Hadrian Andradi, S.Si., M.Sc., Ph.D.
6. Made Tantrawan, S.Si., M.Sc., Ph.D.

Major in Algebra and Combinatorics:
1. Prof. Dr.rer.nat. Indah Emilia Wijayanti, M.Si.
2. Prof. Dr. Sri Wahyuni, S.U.
3. Prof. Dr.rer.nat. Yeni Susanti, M.Si.
4. Dr. Budi Surodjo, M.Si.
5. Dr.rer.nat. Ari Suparwanto, M.Si.
6. Dr. Aluysius Sutjijana, M.Sc.
7. Dr. Sutopo, S.Si., M.Si.
8. Uha Isnaini, S.Si., M.Sc., Ph.D.
9. Iwan Ernanto, S.Si., M.Sc., Ph.D.

Major in Applied and Computational Mathematics:
1. Prof. Dr. Salmah, M.Si.
2. Prof. Dr. Fajar Adi Kusumo, M.Si.
3. Prof. Imam Solekhudin, M.Si., Ph.D.
4. Dr. Dwi Ertiningsih, M.Si., Ph. D
5. Zenith Purisha, S.Si., M.Sc., Ph.D.
6. Dr. Nanang Susyanto, S.Si., M.Sc.
7. Dr. Noorma Yulia M., S.Si., M.Sc.
8. Dr. Sumardi, M.Si.
9. Dr. Lina Aryati, M.S.
10. Dr. Indarsih, M.Si.
11. Dr. Irwan Endrayanto, M.Sc.
12. Dr. Solikhatun, M.Si.
13. Ari Dwi Hartanto, S.Si., M.Sc., Ph.D.

Major in Statistics, Data Sciences, and Actuarial Sciences:
1. Prof. Dr. Gunardi, M.Si.
2. Prof. Dr. Abdurakhman, M.Si.
3. Dr. Adhitya Ronnie Effendie, M.Sc.
4. Drs. Danardono, MPH., Ph.D.
5. Danang Teguh Qoyyimi, S.Si., M.Sc., Ph.D.
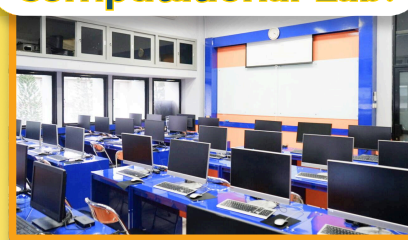6. Ivonne Martin, S.Si., M.Sc., Ph.D.

Details:

Facilities in Department of Mathematics
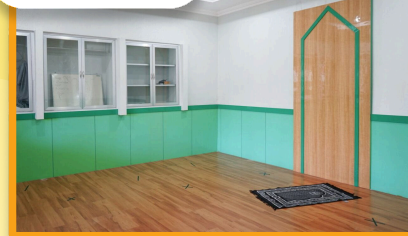
Lobby

Computational Lab.

Meeting Room

Study Area

Coworking Space

Mushola

Reference Room

Discussion Room

The Registration Requirements:

Admissions follow UGM Rector's Decrees No. 11/2016 & 12/2020 and the Indonesian Ministry of Education Regulation No. 53/2023. Applications are open to both Regular (By Courses) and By Research tracks.

General Requirements

- Bachelor's Degree in a relevant field from an accredited institution
- Academic Transcripts
- Two Recommendation Letters
- Gadjah Mada Scholastic Test (GMST) Score ≥ 450
- TOEFL ≥ 400 or equivalent (e.g., IELTS)

More Info

Procedure & Requirement

Registration

Department of Mathematics Website

Further Informations

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