University of Macau

Faculty of Science and Technology

Department of Mathematics

Master of Science (M.Sc.) & Doctor of Philosophy (Ph.D.)

The Department of Mathematics at **University of Macau** invites applications from highly motivated candidates for admission to its postgraduate programs. We are seeking talented individuals with a passion for research and innovation to join our vibrant academic community.

About the Programs

Our graduate programs provide advanced training in Applied Mathematics . Students will engage in rigorous coursework and conduct original research under the supervision of leading experts in the field.

We offer both thesis-based and course-based options, allowing students to tailor their degree to their career aspirations, whether in academia, industry, or the public sector.

Research Focus Areas

Candidates are encouraged to apply, particularly those with interests aligned with our current research priorities:

- **Hypercomplex Signal Analysis**
- **Theory and applications of Geometry Algebra**
- **Hypercomplex integral transforms and applications**

Applicants are welcome to review faculty profiles to identify potential supervisors whose research aligns with their own interests.

Financial Support

- **Ph.D. Positions:** All admitted Ph.D. students typically receive a comprehensive funding package, including a **competitive monthly stipend** and renewable, contingent on satisfactory academic progress.
- **M.Sc. Positions:** Funding may be available in the form of research assistantships, teaching assistantships, or departmental scholarships. Applicants are encouraged to inquire about specific opportunities.

Eligibility Criteria

- **For M.Sc. Applicants:** A Bachelor's degree (or equivalent) in a relevant field with a strong academic record.
- **For Ph.D. Applicants:** A Master's degree (or equivalent) in a relevant field. Exceptional students with a Bachelor's degree (Mathematics) may be considered for direct entry into the Ph.D. program.
- **Language Proficiency:** International applicants must demonstrate English language proficiency (e.g., TOEFL, IELTS) as per university requirements.

Application Requirements

To apply, please prepare the following documents:

1. **Curriculum Vitae (CV)** detailing academic background and any research experience.
2. **Statement of Purpose** (1-2 pages) outlining your research interests, career goals, and reasons for choosing University of Macau.
3. **Academic Transcripts** from all previous post-secondary institutions.
4. **Contact Information** for two or three academic references who can comment on your potential for graduate study.
5. **Recommendation letters**.
6. Language Proficiency: **Proof of English Proficiency**

- Applicants who received their Bachelor's/Master's degree from a university where the medium of instruction was not English are required to provide any of the following as proof of English proficiency:
    - Obtained a TOEFL* score of 550 (paper-based examination) / 80 (Internet-based examination) or above or,

- An IELTS* overall score of 6.0 or above with no sub-score lower than 5.5 or,
- College English Test (CET) score is acceptable to some academic units, please visit corresponding website of each academic unit for details.

*Note: TOEFL and IELTS scores are valid for two years from the test date.

How to Apply

Application Process:

- Application Deadline: End of July, Each year.

- Application Materials:

  - List of required documents, e.g., CV, transcripts, statement of purpose, letters of recommendation

- Online Application: https://isw.um.edu.mo/naweb_grs/faces/index.jspx

- Inquiries: for enquiry regarding your application, please feel free to contact the Graduate School:

Tel : (+853) 8822 4898

Fax : (+853) 8822 2327

Email : gradschool@um.edu.mo

Address : Graduate School, Room G001, Administration Building,University of Macau, N6, Avenida da Universidade, Taipa, Macau, China.

Why Choose Us:

We invite you to consider joining the esteemed **Hypercomplex AI** research group, where you will embark on a journey into the fascinating world of hypercomplex analysis. Here's why our team stands out:

1**. Leadership in Hypercomplex Analysis:** Under the guidance of KOU, our team is recognized for its leadership in advancing the field of hypercomplex analysis, offering a unique opportunity to be part of impactful research.

2. **Cutting-Edge Research:** Engage with the latest theoretical developments and practical applications in hypercomplex number systems, contributing to the evolution of this niche area of mathematics.

3. **Mentorship and Support:** Benefit from direct mentorship by KOU and other seasoned researchers, ensuring you receive personalized guidance and support throughout your PhD journey.

4. **Advanced Resources:** Access state-of-the-art facilities and resources tailored to the needs of hypercomplex analysis, including specialized software and computational tools.

5. **Interdisciplinary Approach:** Our team fosters an environment where interdisciplinary collaboration is encouraged, allowing you to explore the intersections of hypercomplex analysis with other fields such as physics, engineering, and computer science.

6**. Global Network:** Connect with a diverse network of scholars and professionals in the field, providing opportunities for international collaboration and exposure.

7. **Financial Support:** We offer competitive scholarships and funding opportunities to ensure that financial constraints do not hinder your pursuit of academic excellence.

8. **Dedicated Research Projects**: Work on a variety of research projects that align with your interests, allowing you to make a significant contribution to the field while also furthering your own career objectives.

9. **Cultural and Academic Diversity:** Be part of a team that values diversity and inclusion, fostering an environment where different perspectives enrich the research and learning experience.

10. **Career Development:** Gain access to career development resources, including workshops, seminars, and networking events, to prepare you for a successful transition into your future career.

Opting to become a member of Hypercomplex AI research group's team positions you within a forefront research entity, granting you the chance to influence the trajectory of hypercomplex analysis. We are enthusiastic about your potential inclusion in our scholarly circle and are anticipatory of the significant contributions you are poised to deliver.

Closing Remarks:

We look forward to receiving applications from individuals who are passionate about contributing to our research community. Join us in pushing the boundaries of knowledge and making a difference in *Hypercomplex analysis*.

Contact Information:

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