ॐ अमृतेश्वर्ये नम:



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Master of Science (MS) by Research

An Integrated and Interdisciplinary Program

Policies and Procedures

Health Informatics & Data Science

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1. PREAMBLE

- 1.1 The name "Amrita University" will be abbreviated as "the University" in this document.
- 1.2 The PGP (Post-graduate Programs) Dean has primary responsibility over all MS(by Research) Programs in the University. The PGP Dean reports to the Vice Chancellor and works closely with the chairs of school level PGP to ensure the smooth functioning of all MS Programs.
- 1.3 This is an inter-disciplinary program and hence, is administered directly by the PGP Dean.
- 1.4 The award of the MS (by Research) degree shall be in accordance with the Policies and Procedures as outlined in this document, as well as other Ordinances, Rules, and Regulations of the University.
- 1.5 An MS (by Research) student may appeal to the PGP Dean for a waiver/substitution of any requirement. If the appeal is denied, it may be escalated to the Vice Chancellor, whose decision is final and binding.
- 1.6 Amendments to the policies and procedures outlined in this document may be made with the approval of the Vice Chancellor and subsequently ratified by the Academic Council.
- 1.7 Wherever applicable, regulations prescribed by the regulatory bodies such as UGC, MCI, AICTE, etc. take precedence and priority over university rules. All students are required to fully satisfy, and not violate any of the requirements of the respective regulatory bodies while registering for any of the MS(by Research) programs.

2. Registration

2.1 Eligibility

Candidates who are currently pursuing any of the degrees in Sciences, Engineering, or Healthcare and Medical Sciences at any of the Amrita schools/campuses.

2.2 Application

Applications for the MS (by Research) Program are submitted to the PGP Dean directly. Selection is based on the demonstrated inter-disciplinary research aptitude (e.g., publications) of the candidate.

3. MS Advisor

Soon upon admission to the MS (by Research) Program, every student shall be assigned a *MS Advisor* by the PGP Dean taking into account the student's interests and available faculty.

The MS Advisor must be a regular or emeritus or adjunct faculty member of the University with a Ph.D. degree and an established research record. The MS Advisor is primarily responsible for guiding the MS student's research and ensuring that the student makes satisfactory and timely progress towards the MS (by Research) degree.

4.Inter-disciplinary & International

To encourage interdisciplinary research collaboration between students in different schools, two students (either both MS students or one MS student with a Ph.D. student) may work on a common interdisciplinary project.

A faculty member from one campus of the University may serve as MS Advisor for a student in another campus. In order to promote international collaboration, a student may have a faculty member from a collaborating international university as MS Advisor, in which case, the PGP Dean shall recommend to Vice-Chancellor that the international expert be appointed as an Adjunct faculty of the University.

4. MS (by Research) Degree Requirements

4.1 Course Work

The course-work is proposed by the Advisor taking into account the student's background and preparation.

- All students who have completed (or concurrently completing) an M.Tech degree, are required to complete a minimum of 6 additional credits.
- All students who have completed (or concurrently completing) an M.Sc degree are required to complete at least 12 additional credits.
- All students who have completed (or concurrently completing) an MBBS or BDS degree are required to complete at least 12 additional credits.
- All students who have completed (or concurrently completing) a B.Tech are required to complete at least 21 additional credits.

In addition to regular courses offered by the University, three additional types of courses are permitted for MS (by Research) course work: *transfer courses*, *on-line courses*, and *independent-study courses*.

- A transfer course is one that the student has completed in the recent past either (i) here at Amrita itself prior to registration in the MS by Research program, OR (ii) as an exchange student at another reputed university. A course completed for the award of another degree either here at Amrita or at another university is not eligible for transfer.

- An on-line course is one that is offered through MOOCs such as Swayam or Coursera, and completed in recent past or after registering for MS by Research.
- An independent-study course is developed specifically for the student and may involve a combination of self-study and one-to-one instruction by a professor. A student taking an independent-study course is required to submit a publishable, preferably Scopus or PubMed indexed conference or journal paper as an outcome of the course.

A student's course-work may consist of any combination of the above three types of courses. Transfer and on-line courses approved to be counted towards MS by Research coursework and the grades earned will be listed in Amrita University transcripts issued to the student.

4.2 Qualifying Examination

MS by Research students must complete an oral *Qualifying Examination* in one of two ways:

- Students concurrently registered in M.Tech or B.Tech can combine their final project/thesis presentation with the Qualifying Examination.
- All other students are required to take a separate Qualifying Examination.

The Qualifying Examination is an oral examination administered by an ad-hoc 3-member Qualifying Examination Committee chaired by the MS Advisor. In case of an interdisciplinary team of two students, the same committee can examine both students.

4.3 Thesis Work

In addition to course-work, the MS (by Research) student is expected to carry out creative and scholarly research leading up to the completion of a written Thesis.

MS (by Research) degree requires a total of 20 research credits. Students may register for up to 10 research credits per semester. The project credits earned during any concurrently registered bachelor's or master's degree can be counted towards the MS research credits.

4.5 Publication

Before submission of the MS (by Research) Thesis, every student is also expected to have at least one paper accepted for publication, preferably in a Scopus or PubMed indexed conference or journal. This is in addition to any concurrently registered degree requirements (such as a paper for another masters degree being awarded).

5. Duration

Due to the variability of time needed for research, there are no set time-lines that applies to all students. However, students who have registered for the integrated MS (by Research) programs may begin taking additional coursework and participate in research projects as soon as possible and permissible, while maintaining a good standing in their bachelor's or master's degree as the case may be. Students may complete all requirements in anywhere between one to three years duration.