



UNIQUE OPPURTUNITY AT UNIVERSITY OF MADRAS

The University of Madras invites application for the three years **B.Sc (Blended)** program jointly offered with **University of Melbourne, Australia.**

Selection will be based on the entrance examination covering the syllabi in Physics, Chemistry and Mathematics at Higher Secondary (11th and 12th) School level.

NOTE: Online application will open on 15th July 2022.



BACHELOR OF SCIENCE (BLENDED) – BBSC



Jointly offered by the University of Madras, India and Melbourne University, Australia

I. What is B.Sc (Blended) Program?

- BSc (Blended) is a three-year curriculum that integrates the four major disciplines of science (mathematics, physics, chemistry and biology) into a common unified curriculum for all students for two years, followed by a strategic but diverse choice of major subjects in third year.
- It is primarily designed to prepare graduates for further study in postgraduate science and related areas, particularly internationally, but it is also well-suited to workforce participation in science-related companies that have industry-specific workplace training.
- Learning outcomes, graduate attributes, and academic standards are explicitly articulated and monitored, and it is supported by a quality assurance program backed by the University of Melbourne.
- This curriculum is sufficiently broad to encompass and integrate the key elements of maths, physics, chemistry and biology, and rigorous enough to prepare students for transition into a variety of majors in third year.

II. B.Sc. (Blended) at the University of Madras

- B.Sc. (Blended) program will be conducted on self supportive mode at the Guindy Campus, University of Madras.
- The Professors of the University of Madras will be handling the classes.
- The professors of Melbourne University will deliver invited lecturer virtually in specified areas.

III. Who can apply?

Students who have passed 12th standard with mathematics, physics and chemistry subjects can apply. Competence in mathematics is essential.

IV. Quality assurance

1. The curriculum and learning outcomes are benchmarked against undergraduate programs at the University of Melbourne.
2. The Management Committee (comprising of senior professors / subject experts) plays a role in setting the exam papers and determining the grading standard.
3. The Management Committee moderates the remarking of a subset of exam papers to ensure appropriate standard.
4. BSc (Blended) students are benchmarked against University of Melbourne students based on similar assessment tasks to ensure inter-institutional uniformity.
5. The Management Committee may convene audits to ascertain compliance with procedures and standards. These audits may consist of paper/desk audits or inspection visits to teaching facilities.

V. Course structure

The basic course design satisfies the UGC mandated minimum requirement.

Years 1 and 2

The majority of the curriculum for years 1 and 2 is mandatory for all students. This includes:

- the lecture course content for maths, physics, chemistry and biology
- six practical classes in each of physics, chemistry and biology
- one computation subject in each of years 1 and 2
- one English language subject (based on IELTS)
- Flexible course introduced by University of Madras

Year 3

Third Year consists of two semesters devoted to the major discipline, building on the solid basis of First Year and Second Year. It consists of a number of subjects that give depth in specific areas, and a research project subject that spans both semesters.

VI. Research Project

The Research Project is to be undertaken over two semesters in Third Year (Semesters 5 & 6)

Semester 5 is an introduction to the Field of Research, and is largely literature-based. Student to choose a Field of Research, and develop a Semester 6 research project in that area.

Semester 6 is experimental, and is largely laboratory-/field-based. Student to conduct and report on the Research Project.

VII. Compilation of ePortfolio

The **ePortfolio** is an instrument for students to collate examples of the various types of scholarly activities that they have undertaken in their B.Sc. (Blended) degree. These activities should be correlated with the graduate outcomes of the degree, such as communicating to specialist and general audiences, teamwork, critical thinking, demonstrating the key outputs of scientific investigation and discovery, and contemplation of the students learning transition. They complement the discipline learning outcomes of the degree, which are assessed in the examination process.

The ePortfolio activities should be completed as part of the assessment for an undergraduate subject, and they should have been assessed at a passing grade, so there are no additional work tasks students have to do. Students can start populating the ePortfolio in First Year, and then replace items with more advanced examples as they progress through Second- and Third Year.

The ePortfolio should be in the form of a website constructed in Google Sites and published from their own Google Drive – so they have total control of it for ever. .

In the longer term, students can use their ePortfolio to support their Curriculum Vitae – e.g., for job applications, or when applying for postgraduate admission. Potential employers or PG supervisors can visit the Google Site link and view the ePortfolio.

VIII. Assessment and Examination

Assessments for examinations and other tasks will be a combination of internal and external (quality assured) components.

The final exams will be of two-hours duration, and they will count for 50% of the total subject marks. The mark for final exams will be reported as an “External” grade.

Practical examinations will be delivered and assessed internally. The marks for these exams will be reported as part of the “Internal” grade.

Continuous assessment such as in-semester tests, practical reports, written assignments etc, will be assessed internally by the University of Madras. The mark for these exams will be reported as part of the “Internal” grade.

The final mark for a subject will consist of the sum of the internal and external mark.

A pass grade in both the internal and external mark is required to clear the subject.

IX. Benefit to Students

- Learning global curriculum locally.
- Core international curriculum delivered in English.
- Bridge classes will be conducted by the faculty of the University of Madras.
- Interact with students and faculty within and between institutions and counters.
- Equipped for industry – specific training.
- Further study in post graduate science, integrated Ph.D programs.

X. Contact for further information

Prof. Dr.Rita John,
Coordinator, B.Sc. (Blended) program
&
Director,
International Centre, University of Madras,
Chepauk, Chennai – 600 005.
Email: blendedunom@gmail.com