



योग: कर्मसु कौशलम्

Darshan
UNIVERSITY

M.Sc.

MASTER OF SCIENCE IN MICROBIOLOGY



A
life-science
post-graduate
program that provides
academic & industrial
skill-based education in
research and **development**



What is M.Sc. Microbiology?

M.Sc. Microbiology is a master level course. Duration of this course is 2-years long and its syllabus is divided into 4-semesters. It also gives practical & theoretical learning of the subjects to the candidates and covers the studies of micro-organisms & their effects on society. Microbiology is career presenting in nature and provides many job opportunities for the candidates after its successful completion. It is the discipline in which scientists combine life science with other advance sciences to investigate living systems and their advantages.

Microbiology is one of the emerging and applied branches of Life Science which directly impacts over various and essential areas of human life & livelihood. Microbiology is a broad discipline, and microbiologists study microbes at the level of proteins and genes (molecular biology), at the cellular level (cell biology and physiology) and at the community level (public health, ecology and epidemiology). Branches of Microbiology include applied microbiology, mycology, applied virology, parasitology, metabolism & nutritional values, microbial genetics and food & pharmaceutical industries.

Eligibility Criteria: Bachelor’s Degree in Microbiology/ Biotechnology / Biochemistry / B. Voc. etc. or equivalent from a recognised university or an equivalent with a minimum mark of 40 % or more.



Enormous career opportunities

M.Sc. Microbiology is designed to keep in mind that the microbiologist can work with valuable sectors like healthcare, pharmaceuticals, biotechnology, government, education and environmental.

Job Profile	Average Salary (Lakh/Annum)
Microbiologist	2.5 - 4.0
Project Assistant	3.5 - 5.0
Research Analyst	3.5 - 7.0
Clinical Research Associate	2.5 - 4.2
Nutritionist	2.5 - 4.0
Consultant	2.0 - 2.8



Stepping stone for the further studies

M.Phil. in Microbiology: A 1-year postgraduate course, M. Phil in Microbiology deals with research projects in the subjects of bacterial polysaccharides, attachment of pathogens, biofilm formation, etc.

Ph.D. in Microbiology: A doctorate degree, Ph.D in Microbiology revolves around the advanced study of microorganisms like microscopy, unicellular and cell-cluster organisms etc. Students who are pursuing this course need to submit a detailed thesis of their research work. Student can work as scientist after completion of Ph.D.

Pursuing an M.Phil. or a Ph.D. in Microbiology are the best options to study further & these courses will not only bring more research opportunities for an individual but they will also offer higher job positions in the fields with the high recognition.

M.Sc. Microbiology @ DARSHAN UNIVERSITY

- Highly qualified, well experienced and industry linked dedicated faculties.
- Exposure to skills and techniques through seminars and hands on training workshops.
- Well equipped laboratories with research work oriented environment.
- An education system with strong focus on skill development.
- Interdisciplinary approach to achieve over all development of student with aim to impart leadership, entrepreneurship, management and technical expertise in students along with industrial/field exposures.



Syllabus

Semester-1

- General Microbiology, Diversity & Systematics
- Biochemistry and Enzymology
- Basic Immunology and Diagnostics
- Elective -1 (IDEC)
- Seminar

Semester-2

- Microbial Physiology and Metabolism
- Microbial Genetics and Molecular Biology
- Microbial Ecology and Applied Microbiology
- Elective – 2
- Seminar

Semester-3

- Environmental Microbiology and Microbial Remedial Technologies
- Microbial Pathology and Virology
- Bio-engineering and Bio-process Technology
- Elective -3
- Seminar

Semester-4

- Medical Microbiology & Epidemiology
- Microbial Biotechnology and Advances in Microbiology
- Dissertation
- Seminar

Elective Courses

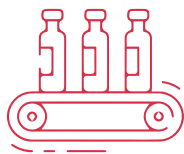
- IDEC: Bio-analytical Techniques and Bioinformatics
- Recombinant DNA(r-DNA) Technology
- Agriculture Microbiology
- Molecular Cell Biology and Inheritance Biology
- Mycology

ADD - ON Courses

- Biosafety & Intellectual Property Rights
- Research Methodology & Scientific Communication
- Microbial Products
- Metagenomics
- Extremophiles
- Nanobiotechnology
- MOOC through SWAYAM / NPTEL
- Review Article Presentation

Are you willing to be a Microbiologist?

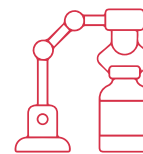
Choose your career from plethora of opportunities available in various sectors, like...



Food & Dairy Industries



Fermentation Industries



Pharmaceutical Industries



R & D Laboratories



Clinical/Pathological Laboratories



Food Testing Laboratories



Forensic Laboratories



Mining Industries



Oil & Natural Gas Industries



Agriculture Industries



Environment Audit Agencies



Academic Institutes



Scientist in the Government agencies



One's own start up



योग: कर्मसु कौशलम्

Darshan
UNIVERSITY

University Campus

📍 Rajkot-Morbi Highway, Rajkot – 363650 📞 9727747310

Counseling Centre

📍 401, Lotus Arcade, 8 - Royal Park, 150 Ft. Ring Road, **Rajkot**

📍 Galaxy Plaza, Nr. Umiya Circle, Opp. Bajaj Showroom, **Morbi**

📞 7096979952, 7096979983 🌐 www.darshan.ac.in