



योग: कर्मसु कौशलम्

Darshan
UNIVERSITY

B.Sc.

BACHELOR OF SCIENCE IN MICROBIOLOGY



A
science
under-graduate
program that provides
health-care & industrial
skill-based education in
life-science subjects



What is B.Sc. Microbiology?

Bachelor of Science in Microbiology (B.Sc. Microbiology) is a fulltime three years (6 semesters) research & applied life-science program that aims to develop knowledge to prevent or treat disease and develops new industrial & healthcare technologies. Microbiologists play essential roles to improve our lives by providing their services in many areas like medicine, food & dairy science, sustainable environment management etc.

Microbiology is one of the highly advanced fields which directly impacts various essential areas of human life & livelihood. Microbiology is a broad discipline and microbiologists study microbes at the level of proteins and genes (molecular biology & genetics), at the cellular level (cell biology and physiology) and at the community level (public health, ecology and epidemiology). Branches of microbiology includes applied microbiology (soil, agriculture, food, dairy & environment), mycology, virology, parasitology, metabolism & nutritional values, microbial genetics & genomics, food & pharmaceutical industries, fermentation industries and recombinant DNA technology.

Why to select Microbiology as area of specialization?

Subject in trend

Microbiology is an applied branch of Biology, along with Botany, Zoology, Environment, Marine science & Biotechnology. In the current scenario, Microbiology is in trend, makes a real difference to society, as well as plenty of opportunities to continue professional development and travel abroad for the purpose of studies, research, business & service (Indian and international agencies provide travel-fellowships).

Stepping stone for further studies

B.Sc. Microbiology graduates can easily be optimized for M.Sc. Microbiology course as well as in other M.Sc. specialization like Biotechnology, Virology, Agri-microbiology, Bioinformatics, Forensics and many more. Microbiologists possess adequate eligibility for pathological studies and jobs by opting for a specialized degree of DMLT or M.Sc MLT.

B.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.
- Inter disciplinary 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

- Fundamentals of Microbiology
- Basics of Biochemistry
- Elective - 1
- Scientific and Technical Communication Skill (STCS)

Semester-2

- Microbial diversity & Systematic
- Microbial Growth and Control
- Elective - 2
- Environment Science

Semester-3

- Microbial Ecology and Environmental Microbiology
- Food and Dairy Microbiology
- Virology and Mycology
- Agricultural Microbiology

Semester-4

- Microbial Physiology and Metabolism
- Molecular Biology
- Bio-analytical Techniques
- Advance Molecular Techniques & Bioinformatics

Semester-5

- Immunology
- Industrial Microbiology
- Microbial Genetics
- Elective - 3

Semester-6

- Medical Microbiology
- Genetic Engineering & Microbial Biotechnology
- Advances in Microbiology
- Elective - 4
- Dissertation / Project Work

Elective Courses

- Microbial Techniques and Instrumentation
- Biophysics and Instrumentation
- Food Fermentation Techniques
- Microbial Quality Control in Food and Pharmaceutical Industries
- Interactions with Entrepreneurs in Microbial Biotechnology and Start-ups
- Bio-computing and Biostatistics
- Cell Biology
- Microbial Products
- Microbial Analysis of Air, Water and Soil

ADD - ON Courses

- Human Value Education
- MOOC Course
- Pharmaceutical Microbiology
- Review Article Preparation and Presentation
- Biosafety & Intellectual Property Rights
- Good Laboratory Practice (GLP) or Good Manufacturing Practice (GMP)
- Phycology
- Research Methodology & Aptitude
- Human Microbial Disease Management and Public Health
- Hospital Management

Are you willing to be a Microbiologist?

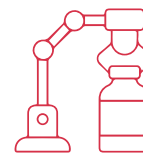
Choose your career from plethora of opportunities available in various sectors, like...



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**

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