

DIRECTORATE OF DISTANCE & ONLINE EDUCATION

B.SC. (ZOOLOGY, BOTANY & CHEMISTRY)

COURSE BROCHURE
2026-27

NAAC GRADE A+

+91 7827038309 admissions@mangalayatan.edu.in www.mude.ac.in

INTRODUCTION

The Bachelor of Science (B.Sc.) in Zoology, Botany, and Chemistry (ZBC) is offered by Mangalayatan University (MUDE) through an online distance learning platform. The course curriculum is designed with applied biological sciences and also incorporates the fundamentals of chemistry. This semester's curriculum covers the topics of the study of living organisms and how they interact with the environment. The B.Sc. in ZBC program integrates the core disciplines of animal, plant, and chemical science.

This flexible online distance learning program offers well-rounded education in both theoretical knowledge and practical applications to prepare students while balancing personal, academic, and professional commitments. The curriculum is designed with a wide range of topics in molecular biology and plant physiology to understand environmental science and other science-related fields and to pursue advanced studies.

MISSION

- To encourage students to enhance their knowledge of biological sciences and applied sciences to understand real-world applications.
- To motivate students to build their analytical thinking abilities and improve research proficiency to understand contemporary challenges.
- To enhance students' knowledge of biodiversity, ecological sciences, and environmental conservation for sustainable management of natural resources.
- To prepare students with quality education and academic excellence in biological sciences for enhanced career opportunities in research, education, environmental consultancy, and other scientific domains.

OBJECTIVES

The prime objective of the B.Sc (ZBC) (online distance learning mode) programme at Mangalayatan University (MUDE) is to provide students with the fundamentals of biological and chemical sciences. The course curriculum is integrated with concepts of plant and animal physiology, cell biology, genetics, environmental science, and biochemistry. Students will develop skills for scientific research, problem-solving, and critical analysis to write reports, presentations, and digital tools for research dissertations.

INSTRUCTIONAL DESIGN

The B.Sc. ZBC programme at Mangalayatan University is segmented into six semesters, with a total of 120 credits to earn the degree. The programme offers flexible online distance learning with a balance of theory and practical coursework. The minimum time period required to complete the degree is three years, and the maximum time period (if extended) is up to four years.

SEMESTER - I					
S.No.	Course Code	Course Name	Credit Marks	Total Marks	Pass Marks
1.	PHB-1111	Mechanics and Wave Motion	4	100	40
2.	CHB-1111	Fundamentals of Inorganic Chemistry	4	100	40
3.	BOB-1111	Microbiology and Plant Pathology	4	100	40
4.	PHB-1151	Physics Lab - I	2	100	40
5.	CHB-1151	Chemistry Lab - I	2	100	40
6.	BOB-1151	Botany Lab - I	2	100	40
7.	ENB-1101	English Communication	2	100	40
8.	CSB-1101	Fundamentals of Computer System & Office Automation	2	100	40
		TOTAL	22	800	320

SEMESTER - II					
S.No.	Course Code	Course Name	Credit Marks	Total Marks	Pass Marks
1.	PHB-1211	Electricity and Magnetism	4	100	40
2.	CHB-1211	Organic Chemistry	4	100	40
3.	BOB-1211	Archegoniates and Plant Architecture	4	100	40
4.	PHB-1251	Physics Lab - II	2	100	40
5.	CHB-1251	Chemistry Lab - II	2	100	40
6.	BOB-1251	Botany Lab - II	2	100	40
7.	ENB-1201	Creative Writing	2	100	40
8.	MMB-1201	Logical Reasoning	2	100	40
		TOTAL	22	800	320

SEMESTER - III					
S.No.	Course Code	Course Name	Credit Marks	Total Marks	Pass Marks
1.	PHB-2111	Optics	4	100	40
2.	CHB-2111	Physical Chemistry	4	100	40
3.	BOB-2111	Flowering Plants Identification & Aesthetic Characteristics	4	100	40
4.	PHB-2151	Physics Lab - III	2	100	40
5.	CHB-2151	Chemistry Lab - III	2	100	40
6.	BOB-2151	Botany Lab - III	2	100	40
7.	MMB-2101	Basic Statistics	3	100	40
8.	VAC-2101	Environmental Education	3	100	40
		TOTAL	24	800	320

SEMESTER - IV					
S.No.	Course Code	Course Name	Credit Marks	Total Marks	Pass Marks
1.	PHB-2211	Perspectives of Modern Physics	4	100	40
2.	CHB-2211	Analytical Chemistry - I	4	100	40
3.	BOB-2211	Economic Botany, Ethnomedicine and Phytochemistry	4	100	40
4.	PHB-2251	Physics Lab - IV	2	100	40
5.	CHB-2251	Chemistry Lab - IV	2	100	40
6.	BOB-2251	Botany Lab - IV	2	100	40
7.	ENB-2101	Personality Development	2	100	40
8.	VAC-2201	Understanding India	3	100	40
		TOTAL	23	800	320

SEMESTER - V					
S.No.	Course Code	Course Name	Credit Marks	Total Marks	Pass Marks
1.	ZOB-3111	Molecular Biology	4	100	40
2.	BOB-3112	Cell Biology and Genetics	4	100	40
3.	CHB-3112	Analytical Techniques	4	100	40
4.	ZOB-3151	Zoology Lab - V	2	100	40
5.	BOB-3151	Botany Lab - V	2	100	40
6.	CHB-3151	Chemistry Lab - V	2	100	40
		TOTAL	18	600	240

SEMESTER - VI					
S.No.	Course Code	Course Name	Credit Marks	Total Marks	Pass Marks
1.	ZOB-3212	Evolutionary Biology	4	100	40
2.	BOB-3211	Plant Physiology, Metabolism and Biochemistry	4	100	40
3.	CHB-3212	Material Chemistry	4	100	40
4.	ZOB-3251	Zoology Lab - VI	2	100	40
5.	BOB-3251	Botany Lab - VI	2	100	40
6.	CHB-3251	Chemistry Lab - VI	2	100	40
		TOTAL	18	600	240

SYLLABI AND COURSE MATERIALS

Our experienced faculty members of Mangalayatan University develop syllabi and self-learning materials. The course content is approved by CIQA and the Board of Studies/Academic Council/Executive Council of India (UGC).

STUDY MATERIAL

The study material for the programme is developed in a digital format and shall be supplied to the students unit-wise for each course per semester.

ONLINE COUNSELLING SESSIONS

The online counselling sessions shall be scheduled beforehand by the subject coordinator. There shall be 6 online counselling sessions of 1 hour each for a 4-credit course, held on Saturdays and Sundays. For courses with 2 credits, there shall be 4 sessions of 1 hour each; for 6-credit classes, 8 sessions of 1 hour each.

STUDENT SUPPORT SYSTEMS

The university appoints programme coordinators, course coordinators, and course mentors to support learners in their studies. Additionally, the university has made appropriate arrangements for various support services, including online counselling and resource-oriented services and evaluation methods for both online and offline modes, for efficient and smooth assistance to the students through the online mode.

PROCEDURE FOR ADMISSIONS, CURRICULUM, TRANSACTION AND EVALUATION

ACTIVITY SCHEDULE					
		Tentative months schedule (specify months) during year			
		July Division		January Division	
S.NO.	Name of the Activity	From(Month)	To (Month)	From(Month)	To (Month)
1	Admission	Jul	Sep	Jan	Mar
2	Assignment submission (if any)	Sep	Oct	Mar	Apr
3	Evaluation of Assignment	Oct	Nov	Apr	May
4	Examination	Dec	Dec	Jun	Jun
5	Declaration of Result	Jan	Jan	Jul	Jul
6	Re-registration	Jul	Jul	Jan	Jan

*** These dates are tentative.**

CREDIT SYSTEM			
Duration of the Programme	Credits	Name of the Programme	Level of the Programme
3 Year	120	UG	Bachelor of Science (ZBC)

FEE STRUCTURE							
Name of the Program	Degree	Duration	One Time Reg. Fee	Semester Fee	Exam Fee Per Semester	One Year Fee	Total Fees
Bachelor of Science (ZBC)	UG	3 Years	1000	12000	1000	27000	79,000
Total							79,000

WHY DISTANCE EDUCATION?

- Convenience of studying classes from home.
- Cost-Effective.
- Time saving.
- No commuting.
- Monetary benefits- No textbooks required.
- Study anytime, anywhere.

ADMISSION PROCESS

- Register with Mangalayatan Distance learning Programmes
- Pay Registration fees through our available payment gateways
- Upload relevant documents and mark sheets
- Get provisional admission
- Pay semester fees
- Get admission confirmation from the University
- Roll number allotted to every student

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