



For Admissions Contact

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WE SHAPE YOUR CAREER FOR THE FIELD OF FUTURE, MARINE BIOTECHNOLOGY

M.sc., M.Phil., and Ph.D., in Marine Biotechnology Admissions 2012-2013



DEPARTMENT OF BIOTECHNOLOGY AMET UNIVERSITY

(Under Sec. 3 of UGC Act 1956)

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Department of Biotechnology

The Department of Biotechnology, AMET University with a long history of teaching and research, is offering postgraduate and research programs *viz.*, M.Sc Marine Biotechnology, M. Phil., (Marine Biotechnology and Marine Microbiology) and Ph. D., in Marine Biotechnology. The Department is equally strengthened with both experienced and young faculty members with vast research experience and credible publications.

The Department is actively engaged in research on Marine Microbial Diversity, Enzyme technology, Secondary metabolites from marine organisms, Marine Bioproducts and Bioprocess Technology with a core theme of **bioactive molecules from marine resources**.

The Department of Biotechnology, AMET University is enriched with specialized research facilities like Gradient PCR machine, UV-Visible spectrophotometer, Refrigerated centrifuges, Deep freezer, Western blotting apparatus, Environmental shaker, UV transilluminator, Microfuges, Electrophoretic apparatuses, Refractometer, Chromatography aids and Solvent extraction apparatus. Besides, the Department is well equipped with very essential instruments for Microbiology, Biochemistry and Biotechnology works.

SALIENT FEATURES AND ACHIEVEMENTS OF THE DEPARTMENT

- Marine Biotechnology is an important field which is still in its infancy and the scope in future is enormous. In this context, our Department is offering short term training programs and projects works for outside students also in the broad area of Life Sciences with special emphasis on Marine Biotechnology.
- ◆ The Department frequently organizes orientation programs, seminars, guest lectures, awareness programs and workshops at State and National levels. During 2010-2011, the Department has organized four national level workshops, three state/National level seminars, one public awareness program and two national level orientation programs for research and publications.
- We are also maintaining a Culture Collection Centre to preserve marine bacteria, marine fungi and marine actinomycetes which were isolated and characterized in our Department by both our post graduate and research scholars.
- The Department has initiated AMET Biotech Outsourcing Unit for identification of bacteria and actinomycetes by 16S rRNA sequence analysis.
- The Department is maintaining collaboration with 7 research institutions/labs across the India/Overseas and established one Memorandum of Understanding (MoU) with a Private Biotech Company.
- The Management is providing a full time research fellowship for a PhD candidate of Department of Biotechnology.
- During 2010-2011, the Department has published three lab manuals, two book chapters, 3 conference abstracts books, four research articles and 66 conference papers (among which 14 are awarded best presentations)



M.Sc., Marine Biotechnology

M.Sc., Marine Biotechnology is an unique post graduate degree which is offered by few institutions in India. AMET University is proud to have such a unique course with International Standards. Our course curriculum has been very sincerely prepared to help the students to get world class information and exposure. New pharmaceutical companies are focusing on developing new drugs from marine resources. The enhanced focus on aquaculture will generate thousands of jobs for trained Marine Biotechnologists. The growing use of marine products in the food, cosmetic, and agriculture industries has created a current demand that we can barely meet. Hence, doing M.Sc., Marine Biotechnology at AMET University is all to enhance your job opportunities in the research and development and industry sector pertaining to Marine Biotechnology.

Our PG program has been planned in such a way to equip the students to make them confident enough in facing the Job market. Our course curriculum has given equal emphasis on both industry, research and academia needs. We encourage our post graduate students to take part in the scientific events throughout the Nation. Since 2009, our students have presented 66 research papers in various scientific events of which 14 are awarded best presentations. During their course, they need to undergo research projects thr ough which many of our students have got publications in refereed journals of international reputation. Industrial visits, field visits and tours are part of the curriculum. At Departmental level, we concentrate and enrich the extracurricular, co-curricular and interpersonal skills of our students through Luminous Club. We are training our post graduate students to equip themselves for a research career and we are proud to say our students are now able to independent research on some unique microorganisms such as luminescent bacteria, fluorescent pseudomonads, marine actinomycetes, bioplastic producing organisms, extremophilic bacteria, enzyme producers etc.

Admission Procedure - Eligibility

Bachelor degree from any recognized Universities, in any branch of Life Sciences with not less than 55% of marks. Candidates awaiting for final year results can also apply.

M.Phil., Marine Biotechnology

M.Phil. Marine Biotechnology at AMET University is a research program where a M.Phil Scholar needs to undergo course work for one semester and project work for the second semester. This degree would hasten the candidates to pursue PhD and also to make him eligible for teaching career in government and private educational institutions. As a subject Marine Biotechnology holds much scope both in research and teaching. Since very few institutes are offering Marine Biotechnology courses in India and the due to the fact that this sector is taking grand leap, the need for teaching professionals in Marine Biotechnology would go higher. In other case, the face of research on Marine Biotechnology was changed in the last one decade. Researchers are concentrating more on biologically active molecules from Oceans mainly to use them as lead molecules to develop novel drugs. Marine Biotechnology has widened its arms to various fields such as drug discovery, food production, bioproducts industry, bioengineering, environmental monitoring, biofuels etc. In this scenario, a M.Phil Degree in Marine Biotechnology would strengthen your profile if you are aspiring either a teaching or research profession. The curriculum for M.Phil Marine Biotechnology has given balanced emphasis on both the uniqueness of Marine Biotechnology and the basic essence of Biotechnology.

Admission Procedure - Eligibility

PG degree from any recognized from any recognized Universities, in any branch of Life Sciences with not less than 55% of marks. Candidates awaiting for final year results can also apply.



M.Phil., Marine Microbiology

Similar to M.Phil, Marine Biotechnology a M.Phil scholar in Marine Microbiology needs to under go course work for one semester and project work for the second semester. Marine Microbiology is an evergreen subject and now has been realized as the need of the hour. An estimate says that only 1% of the total microorganisms in the Marine Environment are cultured which implies the immense scope of Marine Microbiology. Nearly 60% of the microbially derived drugs are from marine microorganisms. Aquaculture has been now identified as the prime source of future protein needs in the food sector. With an annual fish production of approximately six million tons in 2003, India ranks fourth in global fish production and second in aquaculture. The seafood world market has doubled within the last decade reaching US\$49.32 billion. India's share in the world seafood market is 2.4 per cent. Hence, the sea food processing industry and sea food exporting industry is in need of huge manpower to produce and certify the sea foods in compliance with international regulations. A highly competitive course like M.Phil Marine Microbiology at AMET University would make you fit enough to join in the Blue Revolution.

Admission Procedure - Eligibility

PG degree from any recognized from any recognized Universities, in any branch of Life Sciences with not less than 55% of marks. Candidates awaiting for final year results can also apply.













Ph.D., Marine Biotechnology

The immense scope of Marine Biotechnology relies on the research outcomes. All over the Globe research on Marine Biotechnology has been intensified during the past two decades. However, the quality manpower to do research on one of the most challenging research fields, Marine Biotechnology still is not sufficient to meet the needs. Hence, AMET University is offering Ph.D., in Marine Biotechnology for the promotion of quality manpower and pioneering research in Marine Biotechnology. Ph.D., in Marine Biotechnology would certainly enhance the research qualities of dedicated research scholars who aspire to pursue their career in Marine Biotechnology research path. We have well experienced and energetic research Supervisors with high vision on promotion of Marine Biotechnology research. AMET University offers monthly Research Fellowship for selected full time PhD Marine Biotechnology research scholars.

Admissions and Applications:

Admissions are made round the year. As per UGC guidelines for PhD 2010, PhD admissions requires entrance test, personal interview etc. Applications can be downloaded from our University website www.ametuniv.ac.in.

Eligibility:

A pass with at least Second Class in any Post Graduate degree from Life Sciences Disciplines.

Duration

Full time: 3 years along with one semester course work Part time: 4 years along with one semester course work Candidates with M.Phil degree are exempted from course work.

For more details contact

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