

PROSPECTUS 2025 - 2026
Three Year Residential B.Sc. (Nautical Science)
(Affiliated to Indian Maritime University)

Contents

	Page No.
Introduction	2
Career Path for a Deck Officer	2
B.Sc. Nautical Science Degree Programme	3
Code of Conduct	4
B.Sc. Nautical Science Degree Curriculum	6
Fees and Estimated Expenses	7
Loans and Scholarships	8
Eligibility	10
Application Process	10
Selection Process	11



INTRODUCTION

Ocean shipping has always been the most efficient mode of transporting goods. This fact has not changed over the centuries even though technology has made enormous strides. In fact, the maritime industry has effectively harnessed technology to become increasingly more efficient and thereby sustain its comparative advantage over other forms of transport. The growth of global trade has led to a commensurate growth in the world fleet to well over 50,000 ships plying the world's oceans today. These ships are manned by deck officers who are responsible for navigation, cargo operations and maintenance of the ship and by engineer officers who maintain and operate all the machinery on board.

A Deck Officer aboard a ship needs to function in the self-contained environment of a ship at sea and must also demonstrate additional skills such as fire fighting and damage control, boat handling and the ability to carry out rescue operations in an emergency. Further, ships are required to remain in operation 24 hours a day, 365 days a year. All this makes the Deck Officer's job extremely challenging and demanding. At the same time the opportunity to travel the world, work with global organizations and experience varied technologies make navigation and ship handling an exciting career. The demands of the career are of course compensated by excellent remuneration leading to a comfortable lifestyle at an early age.

Due to the global nature of the shipping industry, to be eligible for employment on board ships, Deck Officers must be trained in conformity with the requirements of the International Maritime Organization (IMO) and certified by a recognized authority with respect to competency level. In India, the Directorate General of Shipping (DGS) approves maritime training institutions and their curricula. The same agency also administers examinations to evaluate competency and issues appropriate Certificates of Competency. The general level of training imparted to Indian officer candidates and the standards maintained in evaluation are globally recognized and this ensures the worldwide acceptability of the Indian Officers.

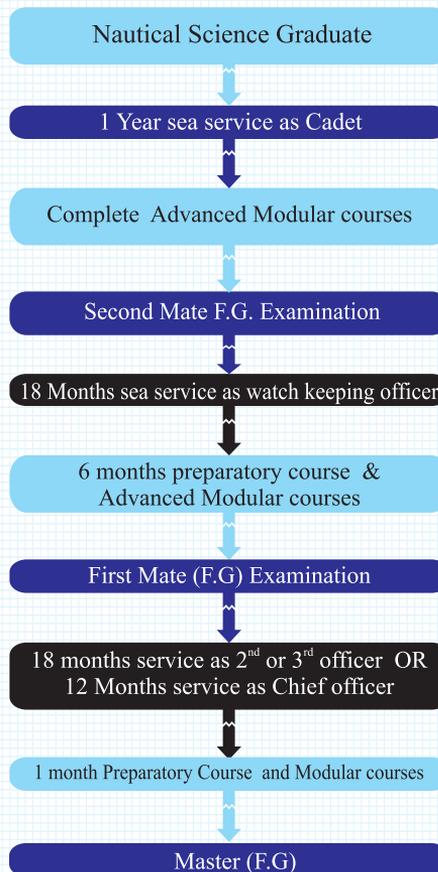
CAREER PATH OF A DECK OFFICER

Upon completion of a 3 year BSc Nautical Science degree course, students will have to complete one year sea service. Thereafter upon passing the Second Mate's Examination, the students will be eligible for appointment as Third Officers on merchant navy ships. A Third Officer receives emoluments of about US\$2,200 per month plus free boarding and lodging while on board. Merchant Navy Officers are allowed to claim tax free income subject to conditions / tax regulations.

As a Deck Officer, one will progress along the chosen career path, moving up the ranks by periodically undergoing competency examinations conducted by the government. In addition to taking certain modular and preparatory courses, one will need to acquire minimum stipulated amount of sea service time before appearing for the examinations. From the rank of Third Officer,

one will progress to a Second Officer, a Chief Officer and ultimately the Captain of a ship. With promotions come substantial improvements in remuneration and a Captain receives about US\$9,500 per month or more net of taxes. It takes about 8 years for a Third Officer to get promoted to the rank of Captain, depending on individual capabilities and the job opportunities available.

It is not uncommon for Deck Officers to retire from sea service well before the traditional retirement age. They are then able to find numerous opportunities ashore with shipping companies and other organisations for providing services to the shipping and other allied industry.



(This is the final qualification necessary to become the Captain of a ship)

B.Sc. NAUTICAL SCIENCE PROGRAM

At Tolani Maritime Institute (TMI), B.Sc. Nautical Science programme is spread over a period of three years and is divided into six academic semesters. The programme is designed to provide a foundation in Navigation, Physics, Mathematics, Cargo Work, Ship Operation and Practical Workshop & Seamanship. After a training period of six semesters on campus, Students become eligible to undergo a 12 months structured training programme on board ships, which is a mandatory requirement to become eligible for Second Mate examination. The institute will provide all assistance through campus placement program for eligible students to be placed onboard ships for shipboard training without any extra fee. Those students, who do not wish to sail on board ships, can opt for any other career as deemed fit by them.

The essence of Nautical Science programme is to train students to become competent deck officers in the maritime environment, capable of managing navigational and cargo work duties. To



facilitate the unique and practical oriented training, the Institute is comprehensively equipped with a Ship in Campus with all ship board structures and equipment that is a representative of shipboard environment, Ship Maneuvering simulator, ECDIS simulator, Steering simulator and Liquid Cargo Handling simulator. Hands on experience is given in the detailed maintenance techniques and procedures for the equipment that a Student will operate as a deck officer. Shipboard environment is unique and training therefore, must be suitably tailored. At TMI, due emphasis is placed on training on simulators, in seamanship and contextual training to intimately acquaint a student with the demands of the marine environment.

The Placement Cell of TMI helps students secure onboard positions.

EVALUATION

An academic year is divided into two semesters of 18-weeks each. During the semester, students are required to complete a prescribed set of courses as laid down by IMU.

TMI follows examination and grading system as laid down by IMU. The curriculum on campus is structured so that by the end of the third year students complete all the modular courses required for one to be employed on board a ship. In addition, the workshop training ensures that by the end of the programme the students are also reasonably skilled in the use of shipboard tools, maintenance procedures and other practical seamanship, sailing and boat handling skills.

CODE OF CONDUCT

TMI requires a high level of discipline in terms of personal appearance and conduct, class attendance, participation in sports etc. All students wear a standard Merchant Navy uniform. Residence in the hostel is compulsory for all students for the entire programme. The Institute strives to instill discipline by encouraging students to participate in various activities that help personality development, team building and a feeling of co-operative amity. All students must participate in all scheduled activities, such as physical training, swimming, games, parades and inspections. Students are expected to abide by the institute rules at all times while on or off campus.

Consistent with the requirements of present legislation in the shipping industry, **TMI has a strict Drug and Alcohol Policy with zero tolerance.** Non-compliance is dealt with severely and may lead to expulsion. Students are expected to protect the property of the Institute at all times and conduct themselves in a manner so as not to cause any damage. The institute reserves the right to recover from errant students the cost of damage inflicted on any Institute property and to take other disciplinary action.

The institute normally operates a five and a half day work week. The workday commences with a muster at 6:00 am followed by 45 minutes of physical training. Thereafter, classes commence at 8:30 am and continue till 4:40 pm with a 60-minute lunch break. Sports are scheduled for late afternoon and students are expected to utilize the evenings for self study, assignments and extra curricular activities.

Leave of absence is granted for emergency reasons only upon the written request of parents. Unauthorized absence is treated as a serious breach of the rules. Minimum 85% attendance is required in classrooms, while workshop sessions require 100% participation. In the event of deficiency in workshop participation, it is necessary for students to complete the requisite workshop hours with attendance outside the normal schedule during the semester or during holiday periods.

Visits of guests are regulated. Parents, guardians and personal friends are allowed to visit students in the hostel during specified visiting hours.

Ragging on campus is strictly prohibited. Any incidence of ragging is immediately acted upon and the guilty is liable to be dismissed from the Institute.



★ 25 Years of Excellence ★

B.Sc. (NAUTICAL SCIENCE) DEGREE CURRICULUM

Semester I

Maritime English
Mathematics
Physics
Computer Science
Ship Construction
Computer Science Practical
Soft Skill Practical
Field Practice - Swimming Training
Book Review

Semester III

Marine Meteorology
Bridge Electronic Equipment and Watch Keeping
Ship Stability-I
Cargo Work I
Celestial Navigation
Nav Equipment OOW Simulator Practical
Project Work Practical
Field Practice – Planetarium/ Light House visit
Technical Writing Skills on Navigational Subjects

Semester V

Ship Manoeuvring and Piloting
Marine Engineering and Automation
Shipboard Operations
IMO and International Conventions
Naval Architecture-I
Engine Room Machinery and Workshop Practical
Watch Keeping Practical - I
Field Practice - Placement Activities
On-board Record Keeping

Semester II

Nautical Mathematics
Nautical Physics and Electronics
Environmental Science
Bridge Equipment and COLREGS
Terrestrial Navigation
Seamanship Practical
Nautical Physics and Electronics Practical
Field Practice - Industry Visits
Communication Skills on Case Studies

Semester IV

Contingency preparedness
Marine Pollution Prevention
Artificial Intelligence and Autonomous Ships
Cargo Work-II
Ship Stability-II
Chart Work Plotting and ECDIS Simulator Practical
Advanced Seamanship Practical
Field Practice- Boat Rowing Exercises
Technical Writing skills on Environmental subjects

Semester VI

HR Practices in Shipping
Logistics and Supply Chain Management
Blue Economy
Commercial Shipping Practices
Naval architecture-II
OOW Simulator Steering and BTM Practical
Watch Keeping Practical - II
Field Practice - Community Service
Maritime Upskilling

FEES AND ESTIMATED EXPENSES ACADEMIC YEAR 2023-24

	SEM I	SEM II	1st YEAR (Sem I & II)
Fees			
Admission & Orientation Fee	25,000	NIL	25,000
Tuition Fee	102,000	102,000	2,04,000
Campus & Establishment Fee	1,24,500	1,24,500	2,49,000
Total fees	2,51,500	2,26,500	4,78,000
Student Services Expenses			
Books	2,500	2,500	5,000
Laundry	2,500	2,500	5,000
Messing	32,250	32,250	64,500
Medical Insurance Premium	1,500	NIL	1,500
Stationery	3,000	3,000	6,000
Uniform	20,000	2,000	22,000
Total Student Service Expenses	61,750	42,250	104,000
Total Fees & Student Service Expenses	3,13,250	2,68,750	5,82,000
DGS Cess @ 1% of total fees & expenses	3,133	2,688	5,821
Caution Deposit (Interest free and Refundable)	20,000	NIL	20,000
Total Payable to TMI	3,36,383	2,71,438	6,07,821
Payable to Indian Maritime University (IMU)	35,000	NIL	35,000
Total Amount (TMI plus IMU)	3,71,383	2,71,438	6,42,821

Note:

- For Student enrolling in the first year of Academic Year 2023-24, the estimated fees and Student Services for the three year programme will be approx. Rs. 19.13 lakhs
- Female students are entitled to a waiver of 50% in Tuition fee for each semester.
- Student Services Expenses are charged on actuals.
- Amount payable to Indian Maritime University (IMU) is required to be paid directly by the students to IMU through IMU portal.
- Caution Deposit is payable on admission. The interest free caution deposit is refundable.
- Statutory taxes / levies, if any imposed, will be charged on actuals.
- Monies due for each semester is payable at the beginning of semester before due dates.
- Late fee @ 18% p.a. is applicable for monies received after due date.
- Value added courses undertaken by the students will attract additional fees.
- Separate charges would be levied at actual costs incurred by the Institute in respect of excursions, visits, medical expenses (to the extent not covered under insurance).
- Fees, Estimated Expenses and Caution Deposit are payable in either of the modes mentioned below -
 - Online through our website
 - Demand Draft in favour of 'Tolani Maritime Institute' at any of the HDFC Bank branches

Medical Insurance

TMI has facilitated an insurance policy at an annual cost of Rs. 1,500 per student. This policy covers the following*:

- Accidental death of student - Rs.5,00,000/-
- Hospitalisation expenses for student - Rs.1,00,000/- per year
- Accidental death of bread winning parent to cover fees of the student for remaining period of the course.

* - Conditions apply



Refund Policy

As mentioned on institute website

<https://tmi.tolani.edu/admission/b-tech-nautical-technology/refund-policy/>

LOANS & SCHOLARSHIPS

Loans

TMI degree programmes are approved by AXIS Bank, HDFC Bank, Corporation Bank, State Bank of India and Credila (an HDFC Ltd. Company). However, candidates can approach any bank for financial assistance.

Scholarships

Liberal scholarships are available every semester to the deserving students. The details of scholarships are as follows-

Merit Scholarships

The institute awards generous merit scholarships to attract the very best talent and promote sustained achievement. For each Nautical Science semester, 12 merit based scholarships are offered. The student who stands first in merit receives the Capt. J C Anand Scholarship of Rs.30,000/- and other rank holders receive scholarships on a sliding scale.

In the first semester on admission, the new entrants are ranked on the basis of the merit list prepared for admission to the Institute. In subsequent semesters, students' performance during the previous semester determines the ranking for the purpose of scholarships. The Institute's Scholarship Committee administers the above scholarships.

Mrs. Papu Tolani Merit Scholarship

Mrs. Papu Tolani, wife of Dr. N P Tolani has instituted a scholarship of Rs.10,000/- per semester. Once a scholarship is awarded, it continues till the end of the last year of the programme subject to performance and conduct of the student conforming to the laid down rules.

Need Cum Merit based Scholarships

Need cum Merit based Scholarships have been instituted for the students undergoing UG programs at TMI as follows:

Tolani Education Foundation (TEF)

Tolani Education Foundation awards scholarships each year to ME and NS degree course students

for every semester. The objective is to provide financial support to the identified students undergoing UG programmes at TMI, Induri. The Scholarship amount of Rs. 15,000/- per semester once awarded continues till the end of the last year of the programme subject to the performance and conduct of the student conforming to the laid down rules.

Menghraj Karna Merit-cum-Need based Scholarship for Girls

Menghraj Karna scholarship is instituted only for girl students undergoing UG programmes at TMI, Induri. The scholarship amount is Rs.10,000/- per semester and once the scholarship is awarded, it continues till the end of the third year of the programme subject to performance and conduct of the student conforming to the laid down rules.

TMI awards the above merit-cum-need based scholarship on the basis of the student's annual family income and other resources. TMI will require documentary evidences as well as family details and an explanation of how they intend to meet the total cost of education at TMI.

Industry Sponsored Scholarships

To promote meritorious students, leading shipping companies have instituted scholarships for the students selected by them in the first/second year of the programme.

Concession in Fee for Girl students

TMI is committed to encouraging girls' participation in the maritime industry. To this end, in addition to the eligibility for the scholarships mentioned above they are given a reduction of 50% in Tuition fees per semester.



ELIGIBILITY

Unmarried candidates, of either sex, born on or after 1st September 2004 are eligible to apply for admission in 2025. The date of birth as recorded on the applicant's School Leaving Certificate will be considered for this purpose. For female candidates there is a relaxation of the age limit up to 2 years.

Candidate must have successfully completed the Senior Secondary Examination (10+2) or its equivalent having secured at least 60% marks in Physics, Chemistry and Mathematics (P-C-M) and at least 50% marks in English either in Class X or Class XII.

Candidates must meet the minimum physical fitness and medical standards as laid out in the Merchant Shipping (Medical Examination) Rules, 2009 as amended from time to time. It is important to note that any deficiency in this respect would disqualify a candidate from a career at sea.

Qualifying in IMUCET is mandatory for admission.

Eyesight: 6/6 vision in better eye and 6/9 in other eye without glasses at the time of admission. Normal colour vision is to be tested by Ishihara test chart.

Having passport is mandatory at the time of admissions

APPLICATION PROCESS

Step I : Fill the application form on TMI website <https://tmi.tolani.edu>. Last date for availability of forms - as declared on website

Step II : Pay the **non-refundable** application and online test fees through the website

TMI will inform the applicant about TMISAT dates.

Please note that you will be required to upload the following documents in soft copy while filling the form online:.

1. Recent passport size photograph
2. Class X mark sheet
3. Class XII mark sheet (Candidates appearing for Class XII exam in 2025 may submit these copies after declaration of results.)
4. Leaving / Transfer Certificate / Birth Certificate (For age proof)
5. Downloaded copies of class XII mark sheet from internet (Candidates appearing for Class XII exam in 2025 may submit these copies after declaration of results.)
6. Passport

SELECTION PROCESS

Tolani Maritime Institute's selection process will test candidates by taking into account candidate's 10+2 PCM marks, rank in IMUCET, result of the TMI online entrance exam, performance in an interview and satisfactory medical tests.

TMI Online Scholastic Aptitude Test (TMISAT)

The test will consist of a Personality test of half an hour followed by Physics, Mathematics, Verbal and Non Verbal intelligence test for two hours.

Medical Test

The medical examination shall be conducted by DGS approved examiners to ensure that candidates are “Fit for sea service”. List of Medical Practitioners approved by D G Shipping is available on the institute’s website.

Personal Interview

The interviewing panel of the Institute, which comprises of faculty and external experts, will make an evaluation of the candidates’ suitability for a sea faring career. All the candidates tested and interviewed will be ranked on the basis of application information, tests and interview. This ranking by the institute will be final and binding. Candidates will be offered seats strictly on basis of merit list.

Admission is confirmed after successfully meeting all the eligibility criteria, getting shortlisted and paying the full fees for semester one by the due date as intimated through Admission Letter. Failure to make the required payment or to report for the course by the stipulated dates along with valid passport and required documents will result in the admission being cancelled.

Candidates accepting admission shall be required to submit the certificates in original together with set of photocopies as intimated in the Admission Letter.

Please note that all photocopies are to be in A4 portrait format. These photocopies are required for Directorate General of Shipping, Govt. of India documentation.