



B.Tech Marine Engineering (MRE)



B.Sc. Nautical Science (BNS)
(Leads to be the Captain of a ship)



95% Onboard Achieved for 2021 Passout and Started for 2022 Final Year Batch



TNU Student



Industry Partner for Internship & Placement



Blue Bird Shipping
Management Pvt.Ltd.
RPSTL -KOL- 006

Courses are Approved by DG Shipping, Govt. of India
#Leads to become the Captain of a Ship





B.Sc. **Nautical Science**

(Leads to be the Captain of a ship)

Eligibility Criteria

12th standard pass with Physics, Chemistry & Mathematics with at least 60% marks, 50% in English in Class-10 or Class-12 final examination. Clearing Medical Test as per D.G Shipping, GOI.

A valid passport is required during admission.
Maximum age limit - 25 Years.

How to Become a Captain of a Ship ?

The life of a merchant navy officer or personnel on board a ship is adventurous, exciting, and extremely rewarding. A marine officer globe trot, visits beautiful places, and meets interesting people. This is true for navigating officers working on any type of ship or vessel irrespective of the people he is working for; however it is an icing on the cake if he/she happens to be on a cruise ship of any of the top 10 cruise lines, not to mention the fun if one is on the biggest cruise ship or a futuristic ship.

Bachelor degree in Nautical Science course assists a person to grow to be a deck officer and land you up as a deck cadet, third officer, second officer, chief officer and finally a captain of a ship. Captain means who is commanding the vessel that is he is overall in charge of the ship.

The main responsibilities of navigating officers are the navigating of seafaring vessels and determining a ship's position by means of the sun, moon, stars, landmarks, magnetic compasses, electronic radio and radar systems. Continual reference to this equipment and to landmarks helps to keep the ship on course. Navigating officers' skills are particularly necessary in situations such as passing through narrow waterways and entering and leaving harbours. They need to be able to navigate a ship by radar alone.

Also the navigating officers are the Administrators of the ship and is responsible for the all the passengers, Cargo and Ship's business. They have to study Navigation, Naval Architecture, Voyage Planning, Meteorology, and many more interesting subjects.

Career Prospects of Nautical Science Graduates

The Bachelor in Nautical Science degree enables the graduates to become Navigating Officers on-board on merchant ships plying worldwide. Joining as a Deck Cadet after graduation, one needs to complete the training process. The career graph then take the cadets through various shipboard experiences and training courses, for finally rising to the coveted level of Captain (Master) of a merchant ship, based on their performance in relevant examinations conducted by the Directorate General of Shipping.

Prospects after becoming a Captain.

- Marine arbitrators to settle disputes between two parties.
- Ship / cargo broker in India or abroad.
- Faculty in various Colleges in India, Gulf countries, UK, Singapore, Australia, Canada.
- Cargo Planner for container liners.
- Compass adjuster in various Indian ports.
- P & I correspondents for carrying out investigation of damage/accidents to ships, cargo .
- Can carry on further studies in Indian Maritime University, Chennai or World Maritime University , Malmo, Sweden and do research.
- Can get jobs in IMB and MSC of the International Maritime Organization, London (which is under the UNO).
- Pilots in various ports of India, Australia, Singapore, UAE , Qatar, Bahrain, Saudi Arabia, West Africa.
- MMD surveyors in various ports of India.
- Draught surveyors in various companies in India and abroad.
- Marine Superintendents of various shipping companies.
- Safety and quality inspectors of various shipping companies
- Auditors of companies and classification societies.
- Surveyors in Classification Societies all over the world.
- Marine lawyers as advisors to judges or fight cases on their own.

The higher position that a navigating officer can aspire for is to become the Master of the ship or Captain who is in charge of the ship and is fully responsible for it.

Many Indian graduates are now placed on board ships owned and managed by various shipping companies including Elegant Marine Services, Wallem Ship Management, Mitsui O.S.K. Lines, MSC Ship Management, United Ocean Ship Management, Gulf Energy Maritime Services (GEM), Wilhelmsen Ship Management, MMS Maritime (MMSI), Apeejay Shipping, Univan Ship Management, Searland Management Service, and Herald Maritime Service, etc.

Infrastructure at Campus



Laboratories



Mechanical Lab



Hydraulic Lab



Heat Lab



Electronics Lab



Control Lab



Boiler Lab



Computer Lab



Fire Fighting Lab



Simulation Lab



B.Tech Marine Engineering

A bachelor's degree in Marine Engineering (B.Tech)

is required for Marine Engineers to join ship. Applicants with practical experience are more attractive to employers, which is why cooperative engineering programs (which combine classroom learning with on-the-job training) are so beneficial and essential.

High school students (10+2) who want to prepare for these professions should study science (like physics and chemistry) and mathematics (like trigonometry, algebra, and calculus) and should pass Board Exam with a minimum of 60% average marks in PCM. Also minimum 50% marks in English in class Xth or XIth standard. Applicants need to clear Medical Test from the DG Shipping, Govt. of India approved doctor.

Undergraduate students of marine engineering can expect to study strength of materials, mechanics of machine, thermodynamics, mathematics, English and marine engineering subjects like marine internal combustion engine, marine auxiliary machineries, ship construction, naval architecture, ship operation and management, engineering drawing and computer-aided design etc.

The age of the candidate should be

between 17-25 years, at the time when the course starts.

Career Prospects of Marine Engineering

It's estimated that job prospects for marine engineers and naval architects will grow by 17% in the next decade. This rate of growth is about average. There is an increasing need for ships and systems which can transport energy products (like liquefied natural gas) all around the planet, which will require more marine engineers and naval architects.

The demand for Marine Engineers in Indian and Foreign shipping companies has risen sharply, with the increase in international global sea traffic. The operations and maintenance of the engine room are the main obligations of a marine engineer. This means that they deal with the technical area of the ship. In fact, they are the overall in-charge of the engine and its crew. The top rung of the hierarchical ladder is the post of a chief engineer.

₹ Salary

The pay is very attractive. A marine engineer at operational level (first rung after the 6 months training) earns between ₹44,000 to ₹88,000 a month. Those joining international shipping companies receive much higher pay packages. This goes up to ₹3-4 lakh a month with promotions. A chief engineer would earn anything around ₹5-10 lakh per month. These figures can change with the size, type and flag of the ship.

How to Become a Chief Engineer of a Ship ?

Trainee Marine Engineers joining ships have to appear for certificate of competency examinations, conducted by D.G. Shipping, after specified interval of sailing experience and gradually rise to 5th Engineer, 4th Engineer, 3rd Engineer, 2nd Engineer and finally the Chief Engineer of a ship, who is the overall in-charge of operation and maintenance of all ship board machineries.

Opportunities at shore:

Marine engineers usually sail for 15-20 years after which they take land jobs in the following areas:

- Surveyors with the Director General of Shipping, Govt. of India
- Surveyor with various Classification Societies all over the world
- Faculty in various Maritime colleges in India, Gulf countries, U.K., Singapore, Australia, Canada.
- Ship Managers, Ship Superintendent in Indian and Foreign shipping companies.
- Surveyors with various Insurance companies, Quality Management system, Comprehension Inspection Program (CIP) monitored by the Director General of Shipping, Mumbai etc.
- Administrators, Banks, Shipyard Engineers
- **Business:** A Marine Engineer can become an entrepreneur in various fields.
- Manager in Any Industry.
- The Chief Engineers with Tea gardens, Five stars Hotels, Tyre Industry, Large sugar mills, Chemical Industries, or any other processed plant.
- There are job opportunities in other sectors too like banks, hotels and power plants.

Additionally, many oil companies are trying to drill for oil under the ocean in climates which are quite inhospitable.

Countries all over the world recognize the urgent need for ships which generate less pollution. Advances in technology are making this possible, and many governments are allocating more resources toward reducing pollution. These factors will create more demand for marine engineers and naval architects for years to come.

Besides this, Marine Engineers can work in governments as well as the Indian Navy.

The Neotia University has professional collaboration with K. Shipping Pvt. Ltd., Deston Ship Management Pvt. Ltd. and Blue Bird Shipping Management Pvt. Ltd. for training, internship and placement of TNU students.



Electrical Lab



Seamanship Lab

A fantastic SHIP MANEUVERING SIMULATOR is there which gives the view from the Navigating Bridge of the ship and can give views of different ports and can give simulated rough sea conditions. This helps to train the Navigating Cadets get an actual hands on experience of the ship.

- The institute has a technical library, stocked with books, journals, videos, and periodicals.
- The workshop has a test rig, diesel engine and working models of ship machinery and components.
- Boat activity is carried out in the campus.
- Cadets must wear uniforms throughout their period of training.
- Ship-in Campus and Free Fall Davit available at running condition for practical training.
- Residence in the hostel is compulsory and separate hostel available for boys and girls.
- Cadets must wear uniforms throughout their period of training.

Industry Partnership



K-Ship - RPSL 249 - Ship Management: TNU Signed MoU with K-Ship, who will be the interface between TNU and leading Marine Companies to help in placing Marine Engineering (MRE) and Bachelor of Nautical Science (BNS) Students.



Destan Ship Management Pvt. Ltd.:

MoU is signed authorizes DSMPL to recruit and place students of Marine Engineering (MRE) and Bachelor of Nautical Science (BNS) in leading shipping companies as engine cadets and Deck cadets.



Blue Bird Shipping Management Private Limited: MoU signed authorizes BBSMPL to recruit and place students of MRE & BNS on shipping companies.

Alumni of NITMAS / TNU: (Partial List)

Since the pass out of 1st batch of Marine Engineering students from **NITMAS / TNU more than 800 students have been placed** at various National and International ships and are sailing all over the world. Some of our students have already become the Chief Engineer also. Following are the **few examples** of our students from different batches those have been placed at various companies across the Globe:

Name of the Students	Name of the Company
Andre Justin Gomes	GEM
Neeraj Gupta	GEM
Kumari Nini	DEEJAY Marine
Prashant Kumar	United Ocean
Manish Dubey	United Ocean
Sanjib Kr. Singh	Apeejay Shipping
Rudra Mukherjee	Apeejay Shipping Ltd
Ravi Gupta	Apeejay Shipping Ltd
Sarvottam Pandit	Apeejay Shipping Ltd
Ishan Nawaz Khan	Bibby Ship Mngement
Sayan Sanyal	ABC Ship Management
Shashank Shekhar	MSC
Kumar Rajan	Wallem
Sonu Kumar	Wallem
Sourav Kumar	Cambell Shipping
Sourav Mitra	Great Offshore
Subrata Dutta	Scorpio
Ajitabh	Fleet Management
Dipak Dave	Wallem Ship Management Pvt Ltd.
Dipwaman Sapui	Wallem Ship Management Pvt Ltd.
Iman Kalyan Dasgupta	Mitsui O.S.K Lines Pvt Ltd.
Ankit Jaiswal	Mitsui O.S.K Lines Pvt Ltd.

Name of the Students	Name of the Students
Abhishek Kumar	Mitsui O.S.K Lines Pvt Ltd.
Sudipta Hazra	Mitsui O.S.K Lines Pvt Ltd.
Binit Kr. Singh	Herald Maritime Services Pvt Ltd.
Jishi Kumar	Herald Maritime Services Pvt Ltd.
Md. Furkan	Apeejay Shipping Ltd
Sovanmoy Mitra	Apeejay Shipping Ltd
Sumit Paul	Gulf Marine
Dipankar Biswas	Gulf Marine
Palash Biswas	Searland Management Services
Najim Mondal	Searland Management Services
Saumava Guha	MTM Ship Management
Bhupendra Kumar	Dockendale Ship Management
Arunava Raha	Tag Offshore
Rahul Kr. Shaw	Tag Offshore
Nilay Bhardwaj	MOL
Navpreet Singh	MOL
Vishal Kumar	Mercator
Shibadyuti Howlader	Anglo Eastern
Gautam Kumar	SVS Marine
Shekh Sariat	SVS Marine
Pankaj Paul	Marketer Lines



MAIN ENGINE BOTTOM PLATFORM INSIDE SHIP ON CAMPUS



CADETS IN THE PARADE SESSION AT CAMPUS



INDEPENDENCEDAY CELEBRATION AT CAMPUS



LIFEBOAT AT CAMPUS

Some activity photographs in Maritime Studies at our campus



WELDING ROOM



ENGINE ROOM INSIDE SHIP ON CAMPUS



LIFEBOAT PRACTICING SESSION AT CAMPUS



FIRE LAB SESSIONS AT CAMPUS

