



# VELS



INSTITUTE OF SCIENCE, TECHNOLOGY  
& ADVANCED STUDIES (VISTAS)

(DEEMED TO BE UNIVERSITY Estd. u/s 3 OF THE UGC ACT, 1956)

**NAAC ACCREDITED**  
PALLAVARAM - CHENNAI - INDIA

## School of Maritime Studies



## Brochure

(Programme and Courses offered)  
2016-2017

PV Vaithiyalingam Road, Velan Nagar, Pallavaram, Chennai - 600117.

Phone: + 91 - 44 - 2266 2500 / 2501 / 2502 / 2503

Website: [www.velsuniv.ac.in](http://www.velsuniv.ac.in)

**VELS INSTITUTE OF SCIENCE  
TECHNOLOGY & ADVANCED STUDIES  
(VISTAS)**

**School of Maritime Studies**

**Brochure**

**(Programme and Courses offered)**

**2016-2017**

---

Off Rajiv Gandhi Salai – OMR (IT Highway), Thalambur, near Navalur, Chennai, Tamil Nadu 603103

Website: [www.velsuniv.ac.in](http://www.velsuniv.ac.in)

## About the School

Efficient transport by sea is extremely important, particularly for a country like India, which has a long coastline and glorious maritime traditions. Indian Merchant Shipping comprises of Passengers vessels, Cargo liners, Tankers, Carriers, Container vessels and many other types of specialized ships. These ships are operated by public and private sector shipping companies and manned by trained navigators, marine engineers and crew members. To cater to such specialized training, School of Maritime Studies offers an Integrated and comprehensive facility for Navigating Officers and Marine Engineers in the Merchant Navy. Candidates who successfully complete training at this School will be eligible for taking jobs as Navigating Officers or Marine Engineers on board any Ship sailing in the vast oceans of the World.

Navigating Cadets passing out from School of Maritime Studies, on the completion of mandatory sea-time requirements and Competence Examinations, will be responsible for the navigation of ships, proper loading and discharging of cargo, maintenance of ships, safety of passengers and crew and observance of various national and international codes of conduct. The trainees progress to be junior navigating officers and on the completion of successive competency exam, ascend in rank and responsibility until finally taking command of a ship as a Captain.

Marine Engineering Cadets passing out from School of Maritime Studies, on the completion of mandatory sea-time requirements and Competency examinations, will be responsible for the running of the main engine of the Ship and all its auxiliaries. They need to be proficient in the areas of Electronics, Electrical, Mechanical, Refrigeration and Air Conditioning Engineering. The Cadets progress to be Junior Marine Engineers on completion of successive Competency Examinations, ascend in rank and responsibility until finally they become Chief Engineers of Ship.

School of Maritime Studies is situated at Vels Thalambur campus. The School is headed by a Director and amongst its Faculty are highly proficient Lecturers who are ex-mariners, and Instructors, with years of experience on board Ships and ashore, who take meticulous care to train the cadets to be future Navigating Officers and Marine Engineers. The School has three sophisticated workshops, a state-of-the-art "Full-mission Navigation Simulator and three laboratories for providing cadets the necessary training. As a part of the curriculum, cadets are taken on board ships in Chennai harbour for shipboard familiarization.

"School of Maritime Studies - Now Graded A1 by the Ministry of Shipping, and is amongst the Best Maritime Institutions in India"

The Director General of Shipping (DGS) developed a mandatory Comprehensive Inspection Programme (CIP) early this year, for all Maritime Colleges in the country, carrying out Presea

Maritime Training. A Grading Scale was specified - A1 Outstanding, A2 Very Good, B1 Good, B2 Average, C1 Below Average, C2 Poor.

The Indian Register of Shipping, a Classification Society, recognized by the Directorate General of Shipping, Govt. of India, was invited to carry out the CIP at the School of Maritime Studies of Vels University. A team of four Auditors carried out an intensive audit, over a period of two days. This audit concluded on the 30th of April, 2014.

At the end of the audit, the grading awarded to the School of Maritime Studies, VISTAS was "A1 - Outstanding", reflecting Excellence in Maritime Education and Training.

The School of Maritime Studies, VISTAS, now ranks amongst the best Maritime Training Colleges in India.

## **SCHOOL OF MARITIME STUDIES**

### **Department of Nautical Science**

1. B.Sc., Nautical Science ... 3 years (6 semesters)

### **Department of Marine Engineering**

1. B.E., Marine Engineering .... 4 years (8 semesters)

## PROGRAM AND COURSE DETAILS 2016-2017

Program Name	Course Code	Subject Name
B.Sc. - Nautical Science	15AMRN61	MARITIME LAW
	15AMRN62	MARITIME COMMERCE
	15BNS001	NAUTICAL MATHEMATICS - I
	15BNS002	NAUTICAL PHYSICS - I
	15BNS003	NAUTICAL MATHEMATICS - II
	15BNS004	NAUTICAL PHYSICS - II
	15BNS101	MARINE METEOROLOGY - I
	15BNS102	MARINE METEOROLOGY - II
	15BNS152	PROFESSIONAL PRACTICE-I
	15BNS154	PROFESSIONAL PRACTICE - II
	15BNS201	ENGLISH - I
	15BNS202	PRACTICAL - NAUTICAL PHYSICS - I
	15BNS203	ENGLISH - II
	15BNS204	PRACTICAL - NAUTICAL PHYSICS - II
	15BNS251	SHIP OPERATION TECHNOLOGY - I
	15BNS252	PRACTICAL - SHIP OPERATION TECHNOLOGY - I
	15BNS253	SHIP OPERATION TECHNOLOGY - II
	15BNS254	PRACTICAL - SHIP OPERATION TECHNOLOGY - II
	15CMRN31	NAVIGATION - I

B.Sc. - Nautical Science	15CMRN32	NAVAL ARCHITECTURE - I
	15CMRN41	NAVIGATION - II
	15CMRN42	NAVAL ARCHITECTURE - II
	15CMRN51	NAVIGATION - III
	15CMRN52	NAVAL ARCHITECTURE - III
	15CMRN61	BRIDGE PROCEDURE AND LEGAL KNOWLEDGE
	15DMRN41	MARINE ENGINEERING AND CONTROL SYSTEMS - I
	15DMRN51	CARGO HANDLING AND STOWAGE - I
	15DMRN52	MARINE ENGINEERING AND CONTROL SYSTEMS - II
	15DMRN61	CARGO HANDLING AND STOWAGE - II
	15DMRN62	MARINE ENGINEERING AND CONTROL SYSTEMS - III
	15ENVS41	ENVIRONMENTAL SCIENCE
	15GMRN61	PRINCIPLES OF MANAGEMENT
	15NMRN31	INTRODUCTION TO COMPUTERS
	15PMRN31	PRACTICAL - VOYAGE PLANNING - I
	15PMRN32	PRACTICAL - COLLISION PREVENTION - I
	15PMRN33	PRACTICAL - NAVIGATION - I
	15PMRN34	PRACTICAL - SHIP OPERATION TECHNOLOGY - III
	15PMRN41	PRACTICAL - VOYAGE PLANNING - II
	15PMRN42	PRACTICAL - COLLISION PREVENTION - II
	15PMRN43	PRACTICAL - NAVIGATION - II

B.Sc. - Nautical Science	15PMRN44	PRACTICAL - MARINE ENGINEERING AND CONTROL SYSTEMS - I
	15PMRN51	PRACTICAL - NAVIGATION - III
	15PMRN52	PRACTICAL - VOYAGE PLANNING - III
	15PMRN53	PRACTICAL - COLLISION PREVENTION - III
	15PMRN54	PRACTICAL - MARINE ENGINEERING AND CONTROL SYSTEMS - II
	15PMRN61	PRACTICAL - MARINE COMMUNICATION
	15PMRN62	PRACTICAL - MARINE ENGINEERING AND CONTROL SYSTEMS - III
	15SMRN31	SHIP OPERATION TECHNOLOGY - III

<b>Program Name</b>	<b>Course Code</b>	<b>Subject Name</b>
B.E. - Marine Engineering	15EMR001	MATHEMATICS - I
	15EMR002	ELECTRICAL ENGINEERING BASICS
	15EMR003	ENGINEERING DRAWING
	15EMR101	PRACTICAL - ELECTRICAL ENGINEERING BASICS
	15EMR201	TECHNICAL ENGLISH
	15EMR202	WORKSHOP TECHNOLOGY
	15EMR203	ENGINEERING MECHANICS
	15EMR204	PRACTICAL - APPLIED MECHANICS
	15EMR251	COMPUTER SCIENCE

	15EMR252	PRACTICAL - BASIC WORKSHOP - I
	15EMR004	MECHANICS OF MATERIALS
	15EMR005	MATHEMATICS - II
	15EMR006	MATERIALS SCIENCE - I
	15EMR007	MARINE MACHINERY DRAWING - I
	15EMR102	PRACTICAL - SAFE WORKING PRACTICES
	15EMR205	PUMPS AND PUMPING SYSTEMS - I
	15EMR206	THERMODYNAMICS - I
	15EMR207	PRACTICAL - HYDRAULICS
B.E. - Marine Engineering	15EMR253	PRACTICAL - STRENGTH OF MATERIALS
	15EMR254	PRACTICAL - BASIC WORKSHOP - II
	15CMRE31	ELECTRIC MOTORS AND STARTERS - I
	15CMRE32	ELECTRONICS - I
	15CMRE33	MATERIAL SCIENCE - II
	15CMRE34	MARINE MACHINE DRAWING - II
	15CMRE35	DECK MACHINERY
	15CMRE36	THERMODYNAMICS - II
	15PMRE31	PRACTICAL - ELECTRICAL MACHINES - I
	15PMRE32	PRACTICAL - ELECTRONICS - I
	15PMRE33	PRACTICAL - ADVANCED MARINE WORKSHOP(DECK/M/C)



	15CMRE41	ELECTRIC MOTORS AND STARTERS - II
	15CMRE42	ELECTRONICS - II
	15CMRE43	THERMAL ENGINEERING
	15CMRE44	SAFE MAINTENANCE ON SHIPS
	15CMRE45	MARINE AUXILIARY MACHINERY
	15PMRE41	PRACTICAL - ELECTRICAL WORKSHOP - MOTORS / STARTERS
	15PMRE42	PRACTICAL - ELECTRONICS - II
	15PMRE43	PRACTICAL - ADVANCED MARINE WORKSHOP (MAM I)
	15SMRE41	LUBE OIL, FUEL OIL AND COOLING SYSTEMS
	15CMRE51	MARINE INTERNAL COMBUSTION ENGINEERING - I
B.E. - Marine Engineering	15CMRE52	CONTROL SYSTEMS FOR MARINE MACHINERY
	15CMRE53	MARINE ENGINEERING PRACTICE - I
	15CMRE54	MARINE ELECTRICAL TECHNOLOGY - I
	15DMRE51	MARINE ENVIRONMENTAL POLLUTION CONTROL
	15GMRE51	SEAMANSHIP AND COMMERICAL GEOGRAPHY
	15PMRE51	PRACTICAL - SEAMANSHIP
	15PMRE52	PRACTICAL - ADVANCED MARINE WORKSHOP (MEP I)
	15PMRE53	PRACTICAL - ANTI-POLLUTION LAB (IN ADVANCED MAR W/S)
	15PMRE54	PRACTICAL - CONTROL ENGINEERING
	15CMRE61	MARINE INTERNAL COMBUSTION ENGINEERING - II

	15CMRE62	SHIP CONSTRUCTION
	15CMRE63	REFRIGERATION, AIR- CONDITIONING AND VENTILATION SYSTEMS
	15CMRE64	MARINE ELECTRICAL TECHNOLOGY - II
	15CMRE65	NAVAL ARCHITECTURE - I
	15CMRE66	MECHANICS OF MACHINES
	15PMRE61	PRACTICAL - ADVANCED MARINE WORKSHOP - REFRIGERATION AND AIRCONDITIONING TRAINER
	15PMRE62	PRACTICAL - ELECTRICAL LAB II AND ELECTRICAL WORKSHOP
	15PMRE63	PRACTICAL - SHIP-IN-CAMPUS - DIESEL ENGINE
	15PMRE64	PRACTICAL - SHIP-IN-CAMPUS - SHIP CONSTRUCTION
	15CMRE71	MARINE POWER PLANT OPERATION