

# University of Mumbai




No. AAMS (UG) /138 of 2021

**CIRCULAR:-**

Attention of the Principals of the Affiliated Colleges and Directors of the recognized Institutions in Faculty of Humanities,

They are hereby informed that the recommendations made by the Ad-hoc Board of Studies in **Maritime Studies** at its meeting held on 24<sup>th</sup> May, 2021 **vide** item No. 2 and subsequently passed by the Board of Deans at its meeting held on 11<sup>th</sup> June, 2021 **vide** item No. 6.25 have been accepted by the Academic Council at its meeting held on 29<sup>th</sup> June, 2021, **vide** item No. 6.25 and subsequently approved by the Management Council at its meeting held on 29<sup>th</sup> July, 2021 **vide** item No. 16 and that in accordance therewith, in exercise of the powers conferred upon the Management Council under Section 74(4) of the Maharashtra Public Universities Act, 2016 (Mah. Act No. VI of 2017) the Ordinance 6667 & 6668 Regulations 9410 & 9411 and the syllabus of M.A. (Maritime Studies) (Sem. I to IV) (CBCS) has been introduced and the same have been brought into force with effect from the academic year **2021-22**, accordingly. (The same is available on the University's website [www.mu.ac.in](http://www.mu.ac.in)).

MUMBAI - 400 032  
25<sup>th</sup> October, 2021  
To,

  
(Sudhir S. Puranik)  
REGISTRAR

The Principals of the Affiliated Colleges and Directors of the recognized Institutions in Faculty of Humanities. (Circular No. UG/334 of 2017-18 dated 9<sup>th</sup> January, 2018.)

A.C/6.25/29/06/2021  
M.C/16/29/07/2021

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No. AAMS (UG) /138-A of 2021

MUMBAI-400 032

25<sup>th</sup> October, 2021

Copy forwarded with Compliments for information to:-

- 1) The Chairman, Board of Deans
- 2) The Dean Faculty of Humanities,
- 3) The Chairman, Ad-hoc Board of Studies in Maritime Studies,
- 4) The Director, Board of Examinations and Evaluation,
- 5) The Director, Board of Students Development,
- 6) The Co-ordinator, University Computerization Centre,

  
(Sudhir S. Puranik)  
REGISTRAR

**Copy to :-**

- 1. The Deputy Registrar, Academic Authorities Meetings and Services (AAMS),**
- 2. The Deputy Registrar, College Affiliations & Development Department (CAD),**
- 3. The Deputy Registrar, (Admissions, Enrolment, Eligibility and Migration Department (AEM),**
- 4. The Deputy Registrar, Research Administration & Promotion Cell (RAPC),**
- 5. The Deputy Registrar, Executive Authorities Section (EA),**
- 6. The Deputy Registrar, PRO, Fort, (Publication Section),**
- 7. The Deputy Registrar, (Special Cell),**
- 8. The Deputy Registrar, Fort/ Vidyanagari Administration Department (FAD) (VAD), Record Section,**
- 9. The Director, Institute of Distance and Open Learning (IDOL Admin), Vidyanagari,**

**They are requested to treat this as action taken report on the concerned resolution adopted by the Academic Council referred to in the above circular and that on separate Action Taken Report will be sent in this connection.**

- 1. P.A to Hon'ble Vice-Chancellor,**
- 2. P.A Pro-Vice-Chancellor,**
- 3. P.A to Registrar,**
- 4. All Deans of all Faculties,**
- 5. P.A to Finance & Account Officers, (F.& A.O),**
- 6. P.A to Director, Board of Examinations and Evaluation,**
- 7. P.A to Director, Innovation, Incubation and Linkages,**
- 8. P.A to Director, Board of Lifelong Learning and Extension (BLLE),**
- 9. The Director, Dept. of Information and Communication Technology (DICT) (CCF & UCC), Vidyanagari,**
- 10. The Director of Board of Student Development,**
- 11. The Director, Department of Students Welfare (DSD),**
- 12. All Deputy Registrar, Examination House,**
- 13. The Deputy Registrars, Finance & Accounts Section,**
- 14. The Assistant Registrar, Administrative sub-Campus Thane,**
- 15. The Assistant Registrar, School of Engg. & Applied Sciences, Kalyan,**
- 16. The Assistant Registrar, Ratnagiri sub-centre, Ratnagiri,**
- 17. The Assistant Registrar, Constituent Colleges Unit,**
- 18. BUCTU,**
- 19. The Receptionist,**
- 20. The Telephone Operator,**
- 21. The Secretary MUASA**

**for information.**

**New ordinances 6667 & 6668 relating to the M.A (Maritime Studies).**

**i. Necessity of starting these Programmes/Courses:**

In India, there are very few Universities that are offering programmes and research opportunities in Maritime Studies, which covers a wide span of marine and maritime subjects, including humanities, law, science & technology, and commerce & management. Maharashtra and Goa have a few institutions that cover some of these subjects, like Indian Maritime University (IMU), Mumbai & Navi Mumbai; Mumbai; Samudra Institute for Maritime Studies (SIMS), Lonavala; Maharashtra Academy of Naval Education and Training (MANET), Pune; Institute of Maritime Studies, Goa; and other institutes/bodies for the Indian Navy, like INS Hamla, Mumbai; INS Shivaji, Lonavala; Naval War College (NWC), Goa; and National Institute of Hydrography (NIH), Goa as well as Maritime History Society (MHS), Mumbai. The IMU also has campuses in Kochi, Chennai, Visakhapatnam and Kolkata. There is also an existing Centre of Excellence in Maritime and Shipbuilding (CEMS) at Mumbai & Visakhapatnam. The various civil institutions mostly run graduate and PG programmes for the Indian Merchant Marine, including Marine Engineering, Naval Architecture & Ocean Engineering, Shipbuilding & Repair, Shipping and Logistics Management, and Nautical Science. On the East Coast, Pondicherry University has a Centre for Maritime Studies (CMS), which conducts research and academic programmes in Maritime Studies, covering subjects of maritime security, connectivity and regional cooperation.

At the international level, in the Indian Ocean Region (IOR), there is a Centre for Maritime Studies at Maldives, which is also focused entirely on training for the merchant marine. There is also another Centre for Maritime Studies at Singapore, which conducts research in issues related to the maritime industry, including trade, ports and shipping, and offers PG programmes in Maritime Technology and Management. At the international level in the IOR, therefore, there is again a paucity of academic institutions with an interdisciplinary approach to maritime studies.

There is, evidently, a paucity of universities and research institutes that cater to the interests of academic and research aspects of Maritime Studies in the country and, especially, in Mumbai.

Apart from a glorious maritime legacy of yore, Maharashtra has about 720 km coastline, which is at the politico-economic heart of India's total 7,516 km coastline. Mumbai has two international seaports, the Mumbai Port Trust (MbPT) at Ballard Estate and the Jawaharlal Nehru Port Trust (JNPT) at Nhava-Sheva, and major Dockyards like the Mazagon Dock and also Naval Dockyard. Mumbai also has a ship breaking yard at Sewri. The ports at Mumbai directly connect to the Arabian Sea and cater for more than 18% of the traffic at India's Major Ports. There are also a number of Shipbuilding yards, both government and private, in the jurisdiction of University of Mumbai and its vicinity, such as those based in Ratnagiri and Ghodbundar in Maharashtra, and Dempo and Chowgule Shipyards in Goa. More importantly, Mumbai houses the Indian Navy's swordarm the Western Naval Command with a range of organisations such as the Western Fleet, the Maharashtra Naval Area and several key naval/maritime focussed entities.

The maritime jurisdiction of Maharashtra, and especially Mumbai, covers the vital energy, trade and commerce routes and centres of India, and is adjacent to the main arterial International Shipping Lanes across the Arabian Sea, which connects India and the strategic Persian Gulf and Gulf of Aden regions to the Indo-Pacific littoral.

Mumbai and Maharashtra/ Goa also have several historic forts, fortifications, coastal structures, architectural remnants, ancient ports and other structures that bear testimony to a long and deep maritime history, incorporating all elements of maritime canvas from war and trade to ship building and cultural connections.

The maritime strategic importance of Mumbai, and the wide spread of important subjects under the rubric of Maritime Studies that are pivotal to the growth and well-being of India, especially Mumbai and Maharashtra, merit reflection in a dedicated vehicle being provided for academic pursuits, education and

deeper understanding of these subjects.

ii) Whether UGC has recommended to start the said courses:

1. **Reference: F No. 2-1/2021 (QIP) from Chairman, UGC to Hon'ble Vice Chancellor, University of Mumbai, dated 19<sup>th</sup> July 2021 ( Pertaining to Multidisciplinary and holistic programmes)**
2. **UGC notification on: University Grants Commission INNOVATIVE PROGRAMMES Teaching and Research in Interdisciplinary and Emerging Areas**
3. **New Education Policy NEP 2020 and thrust on interdisciplinary academic programmes.**

**Initiative taken for implementing multidisciplinary and holistic education in CEMAS, University of Mumbai:**

It is, thus, important that the **University of Mumbai** identifies **Maritime Studies** with Multidisciplinary and Holistic approaches as one of its thrust areas. The award of The University through **Centre of Excellence in Maritime Studies** has embarked towards bolstering higher education and research in **Maritime studies** by envisaging a **holistic and multidisciplinary education** that aims to develop all capacities of student as human beings.

The Centre has a **broad based and interdisciplinary** focus on Marine and Maritime studies, which will cover the entire gambit of **Maritime Laws, Trade, Commerce, Logistics, Science and Technology**.

CEMAS will provide a stimulating intellectual climate for academics and policymakers working on topics related to coasts and seas.

As the Centre highly focuses on holistic, multidisciplinary and interdisciplinary concepts, it not only is catering to develop the individual through Maritime laws, securities, transport, etc. The Centre has also introduced the concept of **BLUE ECONOMY** – which allows prioritizing **the sustainable use of ocean resources for economic growth, livelihoods and jobs, and ocean ecosystem health**.

Through the academic ride, an individual will be groomed to be utilizing the theoretical value by adding it to mini and minor projects, book review, field work, laboratory experiments which allows them to approach the world in real time.

CEMAS is offering internship embedded PG Diploma in Maritime Logistics, Masters programmes in M.A. (Maritime Studies), M.Sc. (Maritime Studies) and M.Com. (Maritime Studies). PhD programme (maritime Studies) will be initiated in the future course. The programmes are attributed with innovative approaches to curriculum development and delivery. Curriculum delivery will work on blended mode of Teaching and Learning, leveraging on the resource pools and expertise that are both, on site and off site for academics and research. This will help the centre to adapt to the very principles that are enshrined in the new National Education Policy (NEP) 2020. The Centre is expected to attract both Indian and foreign students in this domain.

CEMAS is having a broad based multi-disciplinary focus and will take cognizance of marine and maritime studies to cover the gamut of Maritime History, Security, Laws, Trade, Commerce, Logistics, Science and Technology. Centre will collaborate with other premium national and international organizations and institutes in the domain of marine and maritime to leverage on their strengths. The centre therefore, through the University of Mumbai will help develop maritime consciousness, boost higher education and recognize the centrality of Mumbai in national maritime growth.

CEMAS through its myriad courses will inculcate and develop the ability of the student to analyse problems, conduct research and propose solutions while making sound professional judgments with the help of well-read and readily available human resources to meet the challenges of understanding, developing and conserving a benevolent marine ecosystem. As a student of CEMAS, the individual will benefit from this expertise and receive an education that is both, relevant and career enhancing in the existing and futuristic job scenarios. The endeavour of CEMAS programmes is to meet the students' career aspirations and employment opportunities, nationally and internationally, with emphasis on practical expertise application and specialization.

CEMAS will offer first respondent response to the direct needs of the maritime industry by virtue of it being in consonance with industry relevant curriculum development, focus on skill set acquisition and a high job readiness quotient of its students post programme completion. The experiential learning offered by CEMAS makes its programmes unique and distinguishes CEMAS from other university studies.

The centre has a panel of eminent and renowned members in the Board of Management and an eminent body of advisors from Navy, Mercantile Shipping and Commerce, Maritime Strategy, Maritime Law, Maritime History, Maritime and Marine Science and Technology to provide robust direction and pertinent mentoring. The programmes offered by the centre are to be initiated from the academic year 2021-22. The syllabi of the masters programmes has been developed by subject matter experts from academics, Indian Navy, Merchant/Mercantile Navy, Entrepreneurs from maritime logistics, warehousing and blue Economy. The curricula are contemporary with intent to make the post graduates industry ready. Each syllabus is based on UGC's **Outcomes Based Higher Education** framework with measurable deliverables. The advisors for the mini and major project would mainly be a mix of academicians and industry personnel to assign real life interdisciplinary projects to the students. The centre will work towards achieving the translatory provisions of **NEP 2020** with student flexibility being key to the specializations and projects. Soft skills development and sensitization to professional ethics will be covered as additional lectures and orientations at the centre.

CEMAS will aspire to excel in Maritime Commerce, Maritime Law, Maritime Science and Technology, Maritime Heritage and History. It will focus on maritime Security, sustainable ocean resource utilization, maritime conflicts, strategies and resolution, blue Economy, natural hazards and disaster, livelihood based on ocean and coastal areas, coastal habitats, island communities and regional maritime and coastal issues.

CEMAS will endeavour to focus on research related to open ocean. The centre will try to involve in the Deep Ocean Mission of the Ministry of Earth Sciences of India. Centre will undertake projects in oceanography, biotechnology, nanotechnology, material science, environment physics, hydrography, minerals, marine diversity, ocean engineering, instrumentation etc in collaboration with CSIR-NIO and other research organisations.

CEMAS has in its fold Sindhu Swadhyay Sanstha (SSS) that was established on September, 5<sup>th</sup> 2015. Sindhu Swadhyay Sanstha offers 2 years Masters degree programme in Zoology with specialization in Oceanography and Fishery Technology. Since its inception SSS is working diligently to accomplish its mission of achieving academic excellence and providing research and entrepreneurship opportunities to the young aspirants.

**iii) Whether all the courses have commenced from the academic year 2021-22:**

yes, all the three programmes namely Masters programmes in M.A. (Maritime Studies), M.Sc. (Maritime Studies) and M.Com. (Maritime Studies) will commence from the academic year 2021-22.

**iv)** The courses started by the University are self financed, whether adequate number of eligible permanent faculties are available:

Yes, all the three programmes are self-financed. The interdisciplinary programmes will be conducted on blended mode and faculty of University departments and affiliated colleges will be appointed as faculty on visiting or clock hour basis. Scientists and subject matter experts of top maritime organizations of India will be appointed as faculty for online delivery of lectures (upto 40% as permissible by UGC). MoUs are being signed by UoM for collaboration with CSIR-NIO, Goa, CIFE, Versova, Mumbai and other government research organisations for faculty support and collaborative PG project research. Permanent faculty will be recruited in due course of time. Programme coordinator cum faculty is under process for recruitment.

**v)** To give details regarding duration of the course and is it possible to compress the course:

All the three programmes, viz. namely Masters programmes in M.A. (Maritime Studies), M.Sc. (Maritime Studies) and M.Com. (Maritime Studies) are masters (PG) programmes and is of two years duration covering four semesters as per UGC regulations.

**vi)** The intake capacity of each course and no. of admissions given in the current academic year (2021-22):

The approved intake for M.A. (Maritime Studies), M.Sc. (Maritime Studies) and M.Com. (Maritime Studies) is 20 students, each. Admissions will commence from the academic year 2021-22.

**vii)** Opportunities of Employability/Employment available after undertaking these courses:

Masters programmes in M.A. (Maritime Studies), M.Sc. (Maritime Studies) and M.Com. (Maritime Studies) will educate, train and groom graduates that are not only Industry ready but are also attuned to take on further higher education in research. The programme aims to create manpower to service the maritime/marine related industries and R & D, blue economy, maritime logistics, warehousing and allied Industries which is expected to witness an upward trajectory with the recent favorable government policies and schemes in this sector.

India is strategically located across the world's shipping routes, with maritime trade comprising about 95% of India's trade by volume and over 70% by value. The Government launched the ambitious Sagarmala Programme in March 2015. The programme envisions port led development and growth of logistics intensive industries. Under Sagarmala Programme, \$123 Billion is expected to be invested across 415 projects across the areas of Port Modernization and New Port Development; Port Connectivity Enhancement; Port-linked Industrialization; and Coastal Community Development. This programme is expected to create four million new direct and six million indirect jobs, and estimated to enhance India's GDP by upto 4%. The Inland Vessels Bill, 2021 has been passed by the Lok Sabha in July 2021. This will boost domestic cargo movement with potentially lower rates.

# UNIVERSITY OF MUMBAI



**Syllabus**  
for the  
**Programme: M.A (Maritime Studies)**  
**Syllabus for Semesters: I, II, III and IV**  
**Course: Maritime Studies**

(Choice Based and Credit System with effect from  
the academic year 2021-22)

Item No. \_\_\_\_\_

**UNIVERSITY OF MUMBAI**

Sr. No.	Heading	Particulars
1	Title of the Programme <b>O.6667</b>	MA (Maritime Studies)
2	Eligibility for Admission <b>O.6668</b>	Any Bachelor Degree and equivalent programme from recognized University. (Details in Page 4 under programme details)
3	Passing Marks <b>R - 9410</b>	As per University of Mumbai rules, statutes and ordinances
4	Ordinances / Regulations ( if any)	
5	No. of Years / Semesters <b>R - 9411</b>	2 Years, 4 Semesters
6	Level	<del>Certificate/Diploma/UG/PG</del> ( <b>Strike out which is not applicable</b> )
7	Pattern	<del>Semester/Yearly</del> ( <b>Strike out which is not applicable</b> )
8	Status	<del>Revised/New</del> ( <b>Strike out which is not applicable</b> )
9	To be implemented from Academic Year	From Academic Year: 2021-2022

Date:

Signature :

Dr. Anuradha Majumdar

Chairperson, Adhoc BoS in Maritime Studies

Dean, Faculty of Science and Technology



## PREAMBLE

Apart from a glorious maritime legacy of yore, Maharashtra has about 720 km coastline, which is at the politico-economic heart of India's total 7,516 km coastline. Mumbai has two international seaports, the Mumbai Port Trust (MbPT) at Ballard Estate and the Jawaharlal Nehru Port Trust (JNPT) at Nhava-Sheva, and major Dockyards like the Mazagon Dock and also Naval Dockyard. Mumbai also has a ship breaking yard at Sewri. The ports at Mumbai directly connect to the Arabian Sea and cater for more than 18% of the traffic at India's major Ports. There are also a number of Shipbuilding yards, both government and private, in the jurisdiction of University of Mumbai and its vicinity, such as those based in Ratnagiri and Ghodbundar in Maharashtra, and Dempo and Chowgule Shipyards in Goa. More importantly, Mumbai houses the Indian Navy's sword arm, the Western Naval Command, with a range of organisations such as the Western Naval Command, the Western Naval Fleet, the Maharashtra Naval Area and several key naval/maritime focused entities.

The maritime jurisdiction of Maharashtra, and especially Mumbai, covers the vital energy, trade and commerce routes and centres of India, and is adjacent to the main arterial International Shipping Lanes across the Arabian Sea, which connects India and the strategic Persian Gulf and Gulf of Aden regions to the Indo-Pacific littoral.

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The maritime strategic importance of Mumbai, and the wide spread of important subjects under the rubric of Maritime Studies are pivotal to the growth and well-being of India, especially Mumbai and Maharashtra, and merit reflection in a dedicated vehicle provided for academic pursuits, education and deeper understanding of these subjects.

India is strategically located across the world's shipping routes, with maritime trade comprising about 95% of India's trade by volume and over 70% by value. The Government of India has launched the ambitious Sagarmala Project in July 2015 to enhance performance of the countries' logistics sector. The project envisions port led development and growth of logistics intensive industries. Under Sagarmala Project, \$123 Billion is expected to be invested across 577 projects across the coast in Modernization and Development of New Ports; Enhance Port Connectivity; Port-linked Industrialization; and Coastal Community Development. This programme is expected to create four million new direct and six million indirect jobs, and it is estimated to enhance India's GDP by upto 4%.

The interdisciplinary, industry relevant curriculum of the M.A. (Maritime Studies) is following choice-based credit system. The programme is divided into four semesters in which the learner has to complete total 12 courses covering subjects related to humanities along with few interdisciplinary courses. In semesters I, II and III, learners will have to complete 3 core courses and one elective course in each semester. The syllabus of these courses is designed to be dynamic and contemporary that will aid concept learning to synergise field work, research with data analysis in both the mini and major project in semester II and IV, respectively.

Learner will have to undertake book review assignment in semester I as a prelude to the mini project of semester II. Similarly, learner will undertake the second book review in semester III as a literature survey ground work for the project and dissertation of semester IV. Learners are expected to undertake case study, field work or laboratory experimentation to address contemporary problems and challenges associated with marine, coastal communities, history, maritime strategy and maritime humanities related aspects. Learners will be encouraged to select projects related to regional and country relevant topics addressing current challenges, problems and provide analyses, find relevant new knowledge and solutions. Learners will be encouraged to select interdisciplinary projects. This will help learners to attain hands-on skills and experiential learning.

The book reviews, mini term project and major project with dissertation will enable experiential learning through literature survey, case study, field work, data collection, data analysis and laboratory experimentations. This programme will educate, train and groom graduates that are not only Industry ready but are also attuned to take on further higher education in research. The programme aims to create manpower to service the maritime and allied Industry which is expected to witness an upward trajectory with the recent favourable government policies and schemes in this sector. The programme can be executed in the blended mode of teaching and learning.

From,

Dr. Anuradha Majumdar, Chairman, Adhoc BoS of Maritime Studies

Members of Syllabus Committee:

- 1) Rear Admiral Sai Venkat Raman, VSM, (Convener, Syllabus Committee for Humanities, Member, Adhoc BoS)
- 2) Capt (IN) Rikeesh Sharma (Invited Subject Matter Expert)
- 3) Capt (IN) Nitin Agarwala (Invited Subject Matter Expert)
- 4) Capt (IN) Himadri Das (Invited Subject Matter Expert)
- 5) Mr Arun Gupta, (Member, Adhoc BoS)
- 6) Mr Prafula Thalera, (Member, Adhoc BoS)
- 7) Cdr (IN) Manoj K (Invited Subject Matter Expert)

## **Programme: Master of Arts (Maritime Studies)**

### **1. Programme Objectives:**

- a) To develop the interest and broaden understanding of subjects like Maritime History, Maritime Law, Geo-Political Maritime Security, Zoology, Indo-Pacific and IOR Maritime Scenario and allied subjects.
- b) To improve the understanding of maritime security environment, the influence of the nations in the Indian Ocean Region.
- c) To provide the in depth knowledge of various International and National Maritime Laws.
- d) To provide a perfect blend of classical as well as modern concepts of Maritime Strategy.
- e) To acquaint the participants with the vast availability of opportunity in the Maritime field.
- f) To help the Students acquire skills in collection of scientific data, analysing and bringing out valuable data which will enable the policy makers in improving the Maritime Strategy, Security and Laws.

### **2. Programme Outcomes**

- a) The learner will get the comprehensive knowledge of Prevailing Maritime Security Scenario in the Indo-Pacific and Indian Ocean Region.
- b) The learner will acquire knowledge regarding International and National Maritime Laws with relevance to Trade, Environment, Security, Economy and Labour.
- c) The learner will acquire knowledge regarding strategic influence of World Powers in the Indo-Pacific and Indian Ocean Region.
- d) The learner will appreciate influence of various countries in maintaining power in the Indo -Pacific.
- e) The learner will gain insights of various understandings, initiatives and treaties in-force to maintain secure sea lines for maintaining peace and safe trade environment.
- f) The learner will be aware about the rich diversity and history of Indian Maritime Powers from the past.
- g) Learners will appreciate and adapt the principles of sustainability for conservation and long- term sustenance of secure seas.
- h) The learner will be prepared to be absorbed into various firms and government bodies which are catering for the development of Port-Infrastructure as part of the Sagarmala Project,

Port Maintenance and development authorities, Firms involved in Maritime Trade and Commerce as well as academic endeavours.

- i) The learner will understand the skills required for entrepreneurship and marketing in maritime sector.
- j) The learner will be able to analyse and give valuable inputs to the policy makers for further developing the Maritime Laws and Environment.

**3. Eligibility for Admission.**

- (a) Any Bachelor's Degree from a UGC recognised University.
- (b) Or Equivalent Qualification
- (c) Candidates must have secured minimum 50% marks at bachelor's degree examination and as per rules of University of Mumbai and Govt. of Maharashtra.
- (d) Foreign candidates should have equivalent degrees from foreign Universities recognized by Association of Indian Universities (AIU).
- (e) Selection of candidates can be made on the basis of merit and personal interview/written aptitude test (WAT).

**4. Intake Capacity: Maximum intake 20**

**5. Course Structure & Distribution of Credits.**

	<b><u>Paper 1</u></b>	<b><u>Paper 2</u></b>	<b><u>Paper 3</u></b>	<b><u>Elective 1</u></b>	<b><u>Elective 2</u></b>
<b>Semester I</b>	Overview of Maritime History Security and Laws	Introduction to Maritime Sciences – Oceanography, Meteorology, Climatology and Ocean Chemistry	Research Methodology	Maritime Infrastructure Management	United Nations Convention on Law of the Sea
<b>Semester II</b>	Overview of International Maritime Trade	Maritime Power Concepts and Role in International Relations	India's Maritime History and Heritage	Maritime Security Challenges in the Indo-Pacific	Maritime Shipping, Navigation and Salvage Laws
<b>Semester III</b>	India's Maritime Doctrine & Strategy	Maritime Laws in India	Maritime Strategic Environment & Geo Politics in Indian Ocean Region	International Laws on Maritime Safety & Security	Maritime Trade Labour and Environmental Laws
<b>Semester IV</b>	Submission of Dissertation on research topic followed by Viva-Voce (24 Credits)				

**Book Review/Mini Term Project:**

<b>Semester I</b>	One Book review	08 Credits
<b>Semester II</b>	One Book Review	08 Credits
<b>Semester III</b>	One Mini Term Project	08 Credits

**One Semester Dissertation based Project:**

<b>Semester IV</b>	Dissertation based Major R&D Project 24 Credits
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### **Semester Based Details.**

**Semester I:** MA (Maritime Studies) Program for Semester-I consists of four theory courses (3 core and one elective) and one Book Review Assignment. The details are as follows:

**Theory Courses (4):** 16 hours per week (Each subject will have 4 hours of lecture per week)

<b><u>Theory Paper</u></b>	<b><u>Subject</u></b>	<b><u>Lectures (Hrs)</u></b>	<b><u>Credits</u></b>
<b>MMS101</b>	Overview of Maritime History Security and Laws	60	04
<b>MMS102</b>	Introduction to Maritime Sciences – Oceanography, Meteorology, Climatology and Ocean Chemistry	60	04
<b>MMS103</b>	Research Methodology	60	04
<b>MAMS104E</b>	Maritime Infrastructure Management		
<b>MAMS105E</b>	United Nations Convention on Law of the Sea	60	04
<b>Total</b>		<b>240</b>	<b>16</b>

### **Book Review term assignment:**

<b><u>Paper Code</u></b>	<b><u>Subject</u></b>	<b><u>Credits</u></b>
<b>MAMSBR1</b>	Book Review of one book relevant to the course leading to the final year Dissertation based R&D Project Work. 16 hours per week library or engagement and mentoring by advisor with end semester report and presentation.	08

**Semester II:** MA (Maritime Studies) Program for Semester-II consists of four theory courses (3 core and one elective) and one Mini Term Project. The details are as follows:

**Theory Courses (4):** 16 hours per week (Each subject will have 4 hours of lecture per week)

<b><u>Paper Code</u></b>	<b><u>Subject</u></b>	<b><u>Lectures (Hrs)</u></b>	<b><u>Credits</u></b>
<b>MMS201</b>	Overview of International Maritime Trade	60	04
<b>MAMS202</b>	Maritime Power Concepts and Role in International Relations	60	04
<b>MAMS203</b>	India's Maritime History and Heritage	60	04
<b>MAMS204E</b>	Maritime Security Challenges in the Indo- Pacific	60	04
<b>MAMS205E</b>	Maritime Shipping, Navigation and Salvage Laws		
<b>Total</b>		<b>240</b>	<b>16</b>

**Mini Term Project:**

<b><u>Paper Code</u></b>	<b><u>Subject</u></b>	<b><u>Credits</u></b>
<b>MAMSMP</b>	Mini Term Project. 16 hours per week either of case study, field work, data collection, data analysis, laboratory experimentation leading to Dissertation based R&D Project Work with end semester report and presentation.	08

**Semester III:** MA (Maritime Studies) Program for Semester-III consists of four theory courses (03 core and one elective) and one Book Review Assignment. The details are as follows:

**Theory Courses (4):** 16 hours per week (Each subject will have 4 hours of lecture per week)

<b>Paper Code</b>	<b>Subject</b>	<b>Lectures (Hrs)</b>	<b>Credits</b>
<b>MAMS301</b>	India's Maritime Doctrine & Strategy	60	04
<b>MAMS302</b>	Maritime Laws in India	60	04
<b>MAMS303</b>	Maritime Strategic Environment & Geo Politics in Indo-Pacific	60	04
<b>MAMS304E</b>	International Laws on Maritime Safety & Security	60	04
<b>MAMS305E</b>	Maritime Trade Labour and Environmental Laws		
<b>Total</b>		<b>240</b>	<b>16</b>

**Book Review term assignment:**

<b><u>Paper Code</u></b>	<b><u>Subject</u></b>	<b><u>Credits</u></b>
<b>MAMSBR2</b>	Book Review of one book relevant to the course leading to the final year Dissertation Based R&D Project Work. 16 hours per week library or engagement and mentoring by advisor with end semester report and presentation.	08

**Semester IV:** MAMSDP – MA (Maritime Studies) Dissertation Based Major Project Work

MA (Maritime Studies) for Semester-IV consists of full term Dissertation Based Research Project of 24 credits. Every student will have to complete a separate project in Semester IV with twenty four credits (600 marks). Students have to prepare and submit a Master level thesis and the final evaluation will be done by external expert and Guide on the bases of the quality of the thesis and Viva-Voce examination.

**The candidate shall be awarded the degree of Master of Arts (Maritime Studies) after completing the course and meeting all the evaluation criteria.**



**6. Scheme of Examination and Passing.**

- a) This course will have 40% Internal Assessment (IA) and 60% end semester examination
- b) Written examination of 2.5 Hours duration for each course paper at the end of each semester, end semester examinations (ESE) will be conducted by the University as per the existing norms, statutes and ordinances.
- c) Internal Assessment - IA (40%) and End Semester Examination (ESE) (60%)- shall have separate heads of passing. For Theory courses, internal assessment shall carry 40 marks and Semester-end examination shall carry 60 marks for each Theory Course.
- d) To pass, a student has to obtain minimum 40% marks and above, separately in the IA and end semester examination.
- e) The University (external) examination for Theory and term assignments shall be conducted at the end of each Semester and the evaluation of Project work i.e. Mini project and Dissertation, at the end of the forth Semester will be by the external expert and Guide.
- f) The candidates shall appear for external examination of 4 theory courses each carrying 60 marks of 2.5 hours duration and each term assignment (Book Review/Mini Term Project) will carry 200 marks at the end of each semester.
- g) The candidate shall prepare report and give presentation both book review and mini term project under the guidance of a faculty.
- h) Every student will have to complete a separate dissertation based project in Semester IV with twenty four credits (600 marks). Students have to prepare and submit a Master level thesis and the final evaluation will be done by external expert and Guide on the bases of the quality of the thesis and Viva-Voce examination.

**7. Standard of Passing for University Examinations.** As per ordinances and regulations prescribed by the University for semester based credit and grading system.

**8. Standard point scale for grading.**

<u>Grade</u>	<u>Marks</u>	<u>Grade Points</u>
O	80 & above	10
A+	70 to 79.99	9
A	60 to 69.99	8
B+	55 to 59.99	7
B	50 to 54.99	6
C	45 to 49 .99	5
D	40 to 44 .99	4
F (Fail)	39.99 & below	0



## Complete Syllabus: Masters of Arts (Maritime Studies)

### Semester I: Theory Courses

#### MMS101: Overview of Maritime History, Security and Laws (60 Hours, 04 Credits)

##### Course Objectives.

1. Acquaint learners about Indian Maritime History from Ancient times till contemporary period.
2. Impart knowledge of prevailing Maritime Security scenario in the Indo-Pacific and Indian Ocean Region.
3. Impart knowledge of Geo-political environment in the Indo-Pacific and IOR.
4. Familiarize learners to the prevailing important International and National Laws and Legislations with respect to the Maritime and Marine ecosystems.

##### Syllabus.

<b>Unit</b>	<b>Course Content</b>	<b>Hours</b>
1	<b>Ancient India:</b> Indus Valley Civilisation and trade links with Greece, Egypt and other countries. Maritime activity between Indian and Arabian Nations, West and East Asian Countries.	06
2	<b>Medieval Period:</b> Maritime Trade and Diplomacy during Mauryan Period Expansion of Buddhism through sea routes Pandiyar Navy: Sea borne trade and expeditions Chola Navy: Expeditions and relation with Sri Lanka and Southeast Asia Chera Period: Trade and Maritime Activities Gupta Navy	10
3	Trade Between the Arab Counties and the Malabar Coast, religious and cultural influence.	04
4	British, Portuguese, Dutch, French Naval Presence and Influence in the Indian Ocean	04

5	<p>The Mughal Navy</p> <p>The Zamorin Navy</p> <p>History of Marakkars,</p> <p>The Maratha Navy: Shivaji, Kanhoji, Sambaji,</p> <p>The Mysore Navy</p>	04
6	<p><b>Contemporary International Relations:</b></p> <p>Cold War – Rise of super powers, Ideological Bipolarity</p> <p>Military Alliances</p> <p>Arms Race and Nuclear Threat</p>	04
7	<p><b>India and her Neighbours:</b></p> <p>Forms of Government, Executive, Legislature and Judicial System</p> <p>Neighbouring Countries and their relationship with India</p> <p>Indian Ocean Region</p> <p>Indo-Pacific</p> <p>Areas of Dispute with particular reference to South Asia</p> <p>International and Regional Organisations like the UNO, OPEC, NAM, EU, League of Arab States, WARSAW Pact, NATO, SAARC, BRICS, ASEAN, SAGAR, FOIP and IPOI.</p> <p>China Strategy of 21<sup>st</sup> Century Maritime Silk Road.</p>	10
8	<p><b>India Foreign Policy and Maritime Diplomacy</b></p> <p>UNCLOS</p> <p>Coastal Security, Piracy.</p> <p>Leadership Challenges of Maritime Forces in 21<sup>st</sup> Century</p>	06
9	<p><b>An Overview of Maritime Laws:</b></p> <p>Law of Contract</p> <p>The Indian Ports Act, 1908</p> <p>The Major Port Trust Act, 1963</p> <p>Carriage of Good by Sea Act, 1925</p> <p>Merchant Shipping Act, 1958</p> <p>Customs Act, 1962</p> <p>Maritime Arbitration and Alternative Dispute Resolution Modes</p> <p>Salvage, International Salvage Convention 1989, of 2000, SCOPIIC</p> <p>MARPOL</p> <p>SOLAS and ISPS Code</p> <p>Maritime Labour Convention 2006</p>	12

	Hongkong Convention 2009	
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**Recommended Books (Latest Editions):**

1. The Timeless Wake by Cmde Odakkal Jonson
2. A World of Nations: The International Order Since 1945 by William R Kaylor
3. Transition to Triumph: History of Indian Navy by VAdm G H Hiranandani
4. Rulers of the Indian Ocean by G A Ballard
5. A Maritime History of India Adm K Sridharan
6. Coastal Security: Maritime Dimensions of India's Homeland Security by Kunwar Rajendra Singh
7. Coastal Security: The Indian Experience by Pushpita Das
8. Role of Coast Guard in the Maritime Security of Indian by Prabhakaran Paleri
9. An Integrated Approach to Coastal and Offshore Defence: Leveraging the Coastal Security by Capt Himadri Das
10. Armed Robbery in Sea in India: Trends and Imperatives by Capt Himadri Das.
11. Coastal Security, Challenges, Concerns and Wayahead by Brig Hemant Mahajan

**Course Outcomes:**

The learner will be able to acquire knowledge on the following:-

1. Vibrant Maritime History of India from Ancient, Medieval, Colonial, Contemporary Period.
2. Prevailing Security Scenario and Geo-Politics in the Indo-Pacific and Indian Ocean Region.
3. To familiarise and gain basic knowledge on critical International and National Maritime Laws.
4. Would have gained basic knowledge on strategic importance of the Indo-Pacific and IOR.

**MMS102: Introduction to Maritime Sciences – Oceanography, Meteorology, Climatology and Ocean Chemistry (60 Hours, 04 Credits)**

**Course Objectives:**

1. To impart basic knowledge and understanding of the Oceanography.
2. To impart knowledge on the Geological characteristics of the Ocean.
3. To acquaint the learner with Ocean Climatology.

4. To familiarize the learner with knowledge on Ocean Chemistry.

Unit	Course Content	Hours
1	<p><b>Introduction to Oceanography</b></p> <ul style="list-style-type: none"> <li>a) Geological time scale and major physico-chemical and biological events in Earth's history</li> <li>b) Plate Tectonics and Seafloor Spreading</li> <li>c) Ocean floor morphology</li> <li>d) Introduction to Paleoclimatic studies</li> <li>e) Marine Sediment distribution, classification, sources and dispersal pathways (3 hrs)</li> <li>f) Introductory Marine Geochemistry</li> <li>g) Marine Minerals</li> <li>h) Applications of isotopes for geoscientific studies</li> <li>i) Marine microfossils and their applications with special reference to Quaternary climatology</li> </ul>	15
2	<p><b>Physical Oceanography and Meteorology:</b></p> <ul style="list-style-type: none"> <li>a) Structure and composition of the atmosphere</li> <li>b) Atmospheric circulation, Asian Monsoon and tropical cyclone</li> <li>c) Surface heat budget of the ocean</li> <li>d) Physical properties of sea water and their distribution, light and sound propagation in sea water</li> <li>e) Water masses and thermohaline circulation</li> <li>f) Indian Ocean circulation</li> <li>g) Oceanic processes: Upwelling/sinking and meso-scale eddies</li> <li>h) Oceanic processes: ENSO and IOD</li> <li>i) Wave generation, growth and decay</li> <li>j) Generation of tides, Semi-diurnal and diurnal tides, tidal constituents</li> </ul>	15
3	<p><b>Biological Oceanography:</b></p> <ul style="list-style-type: none"> <li>a) General microbial ecology</li> <li>b) Measurement of primary production</li> <li>c) Benthic-Pelagic coupling , Benthic ecology, Benthic biomass structure and production</li> <li>d) Fisheries oceanography</li> <li>e) Plankton carbon cycling</li> <li>f) Introduction to suboxic and anoxic oceanography, Dynamics of DOM</li> </ul>	12

	<p>under anoxic conditions</p> <p>g) Food web dynamics and climate change</p> <p>h) Biofouling/Bioinvasion</p> <p>i) Zooplankton and phytoplankton</p> <p>j) Fishery biology</p>	
4	<p><b>Ocean Chemistry:</b></p> <p>a) Elemental composition of seawater and behaviour of substances</p> <p>b) Chemical speciation in seawater</p> <p>c) Major marine biogeochemical cycles</p> <p>d) Marine biogenic gases of climatic importance</p> <p>e) Global Climate Change and ecosystem impacts</p> <p>f) Exchange of materials across marine interfaces</p> <p>g) Sampling and analytical tools in chemical oceanography</p>	06
5	<p><b>Ocean Climatology</b></p> <p>a) Climate classification</p> <p>b) Greenhouse gases: Introduction, causes of changing concentration, role in climate change</p> <p>c) Cryosphere and its role in climate change</p> <p>d) Energy Balance of the Earth and atmosphere</p> <p>e) Ocean-climate linkage</p>	06

**Recommended Books (Latest Editions):**

**Recommended Books (Latest Editions)**

1. Essential of Oceanography, by Trujillo/ Thurman (6 January 2015)
2. Oceanography: An Invitation to Marine Science, by Tom Garrison (31 July 2012)
3. Essentials of Meteorology: An Invitation to the Atmosphere by C. Donald Ahrens
4. Meteorology Today: An Introduction to Weather, Climate, and the Environment by Robert Henson, C. Donald Ahrens

**Course Outcome:**

The learner will be able to acquire knowledge on the following:-

1. Understand the Topography and Oceanography.
2. Effective Ocean influence on the climate.
3. Understand and acquire knowledge on Ocean Chemistry
4. Understand the various dynamics of Ocean Meteorology.

**MMS103: Research Methodology (60 Hours, 04 Credits)**

**Course Objectives:**

1. To impart knowledge on the process of Research Paper Writing.
2. To acquaint the learner with the in depth knowledge on the various methods involved in carrying out research.
3. The learner will be imparted knowledge on the steps of carrying out focused research.

<b>Unit</b>	<b>Course Content</b>	<b>Hours</b>
1	Research Methodology: An Introduction Meaning of Research Objectives of Research Motivation in Research Types of Research Research Approaches Significance of Research Research Methods versus Methodology Research and Scientific Method Importance of Knowing How Research is Done Research Process Criteria of Good Research Problems Encountered by Researchers in India	08
2	Defining the Research Problem What is a Research Problem? Selecting the Problem Necessity of Defining the Problem Technique Involved in Defining a Problem	06
3	Research Design Meaning of Research Design Need for Research Design Features of a Good Design Important Concepts Relating to Research Design Different Research Designs Basic Principles of Experimental Designs	06



4	<p>Methods of Data Collection</p> <p>Collection of Primary Data</p> <p>Observation Method<sup>96</sup>Interview Method</p> <p>Collection of Data through Questionnaires</p> <p>Collection of Data through Schedules</p> <p>Difference between Questionnaires and Schedules</p> <p>Some Other Methods of Data Collection</p> <p>Collection of Secondary Data</p>	08
5	<p>Processing and Analysis of Data</p> <p>Processing Operations</p> <p>Some Problems in Processing</p> <p>Elements/Types of Analysis</p> <p>Statistics in Research</p> <p>Measures of Central Tendency</p> <p>Measures of Dispersion</p> <p>Measures of Asymmetry (Skewness)</p> <p>Measures of Relationship</p> <p>Simple Regression Analysis</p> <p>Multiple Correlation and Regression</p> <p>Partial Correlation</p> <p>Association in Case of Attributes</p>	08
6	<p>Sampling Fundamentals</p> <p>Need for Sampling</p> <p>Some Fundamental Definitions</p> <p>Important Sampling Distributions</p> <p>Central Limit Theorem</p> <p>Sampling Theory</p> <p>Sandler's A-test</p> <p>Concept of Standard Error</p> <p>Estimation</p> <p>Estimating the Population Mean (<math>\mu</math>)</p> <p>Estimating Population Proportion</p> <p>Sample Size and its Determination</p> <p>Determination of Sample Size through the Approach Based on Precision Rate and Confidence Level</p> <p>Bayesian Statistics</p>	08

7	<p>Testing of Hypotheses</p> <p>What is a Hypothesis?</p> <p>Basic Concepts Concerning Testing of Hypotheses</p> <p>Procedure for Hypothesis Testing</p> <p>Flow Diagram for Hypothesis Testing</p> <p>Measuring the Power of a Hypothesis Test</p> <p>Tests of Hypotheses</p> <p>Important Parametric Tests</p> <p>Hypothesis Testing of Means</p> <p>Hypothesis Testing for Differences between Means</p> <p>Hypothesis Testing for Comparing Two Related Samples</p> <p>Hypothesis Testing of Proportions</p> <p>Hypothesis Testing for Difference between Proportions</p> <p>Hypothesis Testing for Comparing a Variance to Some Hypothesized Population Variance</p> <p>Testing the Equality of Variances of Two Normal Populations</p> <p>Hypothesis Testing of Correlation Coefficients</p> <p>Limitations of the Tests of Hypotheses</p> <p>Important Nonparametric or Distribution-free Test</p> <p>Relationship between Spearman's <math>r_s</math> and Kendall's <math>W</math></p> <p>Characteristics of Distribution-free or Non-parametric Tests</p>	08
8	<p>Interpretation and Report Writing</p> <p>Meaning of Interpretation</p> <p>Why Interpretation?</p> <p>Technique of Interpretation</p> <p>Precaution in Interpretation</p> <p>Significance of Report Writing</p> <p>Different Steps in Writing Report</p> <p>Layout of the Research Report</p> <p>Types of Reports</p> <p>Oral Presentation</p> <p>Mechanics of Writing a Research Report</p> <p>Precautions for Writing Research Reports</p>	08

### **Recommended Books (Latest Editions):**

1. Research Methodology Methods and Techniques by C.R.Kothari, Gaurav Garg, New Age International Publishers
2. Methodology of Research in Social Science by O.R. Krishnaswami and M. Ranganatham, Himalaya Publishing House

### **Course Outcomes:**

The learner will be able to understand and carry out the following:-

1. Identify the research problem, formulation of hypothesis, carryout data analysis using systematic and scientific methods.
2. Formulate the Research Process and arrive at the conclusion and recommendations in a logical manner.
3. Understand the need of Proper Research Writing.
4. Carryout a systematic and logical Research towards writing the mini project report, Book review and Dissertation.

### **MAMS104E: Maritime Infrastructure Management (60 Hour, 04 Credits)**

#### **Course Objectives:**

1. To impart knowledge to the learner on the important various Port Infrastructure.
2. To impart various aspects of proper management of maritime infrastructure.
3. To acquaint the learner on the importance of ports and inland depots and its evolution as hub for economic activities.
4. Various port connectivity and transportation management.

<b>Unit</b>	<b>Course Content</b>	<b>Hours</b>
1	Port Infrastructure Waterside Yard Landside	04
2	Traditional Port functions and its evolution as hub for economic activity	03
3	Multiplier Effect on Regional Economy	03

4	Port Connectivity: Container Freight Station (CFS) Inland Container Depots (ICD) Dry Ports	02
5	Rail and Road connectivity to ports	02
6	Hub Ports and Feeder Ports	02
7	Port Tariffs and economics	02
8	World Bank Model for Port Development and Management	02
9	Global experience in different models	02
10	Global & Domestic Port Regulatory System- International Maritime Organisation (IMO) International Ship and Port Facility Security Code (ISPS)	04
11	Agencies involved in Port Activities / Ancillary Services	02
12	Private Sector Participation in Ports- Model Concession Agreement and its variants.	02
13	Terminal Operating System & Port Operating System (IT & Technology solutions)	02
14	Smart Ports/ Fully Automated Terminals	02
15	Inland Water Transport & integration with EXIM/ Domestic Cargo Movement	04
16	Multi Modal Hubs	02
17	India Maritime Infrastructure Development Initiatives: Sagarmala Project India Maritime Vision 2030	05
18	Case Study Concepts of port management Challenges in coastal sea trade Comparative Study of Port Management: India & Global Traditional vs futuristic use of Inland Waterways Different Models of Port Tariff fixation: a critical analysis	15

### **Recommended Books (Latest Editions):**

1. Port Management and Operations by Maria G. Burns
2. Port Business by Jurgen Sorgenfrei
3. Maritime Logistics: A Guide to Contemporary Shipping and Port Management - 2nd Edition, by Dong-Wook Song (Editor), Photis M. Panayides (Editor)
4. Port Management and Operations - 1st Edition, by Maria G. Burns (Author)
5. Port Management and Operations (Lloyd's Practical Shipping Guides) 3rd Edition, by Patrick Alderton (Author)
6. Ports and Terminals – Sep 2012, by H. Ligteringen (Author), H. Velsink (Author)
7. Infrastructure Development & Financing by Raghuram, McMillan
8. Infrastructure Management, W. Hudson, Ralph Haas, Waheed Uddin – TMH
9. India Infrastructure Reports, Oxford University Press
10. Committee Report on Infrastructure, Govt. of India by Rakesh Mohan
11. World Bank – World Development Report 1994
12. Urban Infrastructure and Governance by G. Ramesh, Nagadevara Naik and Anil Suraj - Routledge
13. Public-Private Partnerships by G. Ramesh, Nagadevara Naik and Anil Suraj - Routledge

### **Course Outcomes:**

1. The students will have deeper understanding of the World Bank suggested Model for PPP in the Maritime domain.
2. Improved understanding of the Service level expectations from various stakeholders in the SCM.
3. Setting up of Logistics entities by professionals thereby increasing the share of organised activity which at present is mostly in the domain of unorganised sector.
4. Increased opportunities for Indian students in the global Supply Chain Market.

## **MAMS105E: United Nations Convention on Law of the Sea (60 Hours, 04 Credits)**

### **Course Objectives:**

1. Laws of the Sea course is intended to cover the historical development of the legal regulation of the sea, its culmination in the form of United Nations Convention on the Law of the Sea (LOSC) 1982, implementation of the LOSC and the developments after its adoption.
2. It would deal with the developments at various international conferences prior to the UNCLOS-III.
3. It would focus on the debates on issues like common heritage of humankind and Exclusive Economic Zone which went into the making of the LOSC. As the LOSC1982 is considered as the Constitution of the Oceans, the Course content elaborately focuses on the various maritime zones as provided under the Convention.
4. Jurisprudence of the international courts and tribunals continues to play a significant role in the clarification of the LOSC provisions on issues like delimitation of maritime zones and other issues. Discussions would focus on this jurisprudence whenever necessary.
5. The Course is aimed at contextualising the historical and theoretical underpinnings of the development of the law of the sea leading to the adoption of the Geneva Conventions on the Law of the Territorial Sea; analysing and discussing the various parts of the Convention; and evaluating the application of the Convention.

<b>Unit</b>	<b>Course Content</b>	<b>Hours</b>
1	Preamble Introduction	1
2	Territorial sea and contiguous zone Section 1. General provisions Section 2. Limits of the territorial sea Section 3. Innocent passage in the territorial sea Subsection a. Rules applicable to all ships Subsection b. Rules applicable to merchant ships and government ships operated for commercial purposes Subsection c. Rules applicable to warships and other government ships operated for non-commercial purposes Section 4. Contiguous zone	3
3	Straits used for international navigation Section 1. General provisions	3

	<p>Section 2. Transit passage</p> <p>Section 3. Innocent passage</p>	
4	Archipelagic States	2
5	Exclusive Economic Zone	2
6	Continental Shelf	2
7	<p>High seas</p> <p>Section 1. General provisions</p> <p>Section 2. Conservation and management of the living resources of the high seas</p>	2
8	Regime of Islands	2
9	Right of access of land-locked states to and from the sea and freedom of transit	2
10	<p>The area</p> <p>Section 1. General provisions</p> <p>Section 2. Principles governing the area</p> <p>Section 3. Development of resources of the area</p> <p>Section 4. The authority</p> <p>    Subsection a. General provisions</p> <p>    Subsection b. The assembly</p> <p>    Subsection c. The council</p> <p>    Subsection d. The secretariat</p> <p>    Subsection e. The enterprise</p> <p>    Subsection f. Financial arrangements of the authority</p> <p>    Subsection g. Legal status, privileges and immunities</p> <p>    Subsection h. Suspension of the exercise of rights and privileges of members</p> <p>Section 5. Settlement of disputes and advisory opinions</p>	4
11	<p>Protection and preservation of the marine environment</p> <p>Section 1. General provisions</p> <p>Section 2. Global and regional cooperation</p> <p>Section 3. Technical assistance</p> <p>Section 4. Monitoring and environmental assessment</p> <p>Section 5. International rules and national legislation to prevent, reduce and control pollution of the marine environment</p>	6

	<p>Section 6. Enforcement</p> <p>Section 7. Safeguards</p> <p>Section 8. Ice-covered areas</p> <p>Section 9. Responsibility and liability</p> <p>Section 10. Sovereign immunity</p> <p>Section 11. Obligations under other conventions on the protection and preservation of the marine environment</p>	
12	<p>Marine scientific research</p> <p>Section 1. General provisions</p> <p>Section 2. International cooperation</p> <p>Section 3. Conduct and promotion of marine scientific research</p> <p>Section 4. Scientific research installations or equipment in the marine environment</p> <p>Section 5. Responsibility and liability</p> <p>Section 6. Settlement of disputes and interim measures</p>	4
13	<p>Development and transfer of marine technology</p> <p>Section 1. General provisions</p> <p>Section 2. International cooperation</p> <p>Section 3. National and regional marine scientific and technological centres</p> <p>Section 4. Cooperation among international organizations</p>	4
14	<p>Settlement of disputes</p> <p>Section 1. General provisions</p> <p>Section 2. Compulsory procedures entailing binding decisions</p> <p>Section 3. Limitations and exceptions to applicability of section 2</p>	6
15	General provisions	2
16	Final provisions	2
17	<p><b>Annexes to the Convention</b></p> <p>Annex i. Highly migratory species</p> <p>Annex ii. Commission on the limits of the continental shelf</p> <p>Annex iii. Basic conditions of prospecting, exploration and exploitation</p> <p>Annex iv. Statute of the enterprise</p> <p>Annex v. Conciliation</p>	13



	<p>Annex vi. Statute of the international tribunal for the law of the sea</p> <p style="padding-left: 40px;">Section 1. Organization of the tribunal</p> <p style="padding-left: 40px;">Section 2. Competence</p> <p style="padding-left: 40px;">Section 3. Procedure</p> <p style="padding-left: 40px;">Section 4. Seabed disputes chamber</p> <p style="padding-left: 40px;">Section 5. Amendments</p> <p>Annex vii. Arbitration</p> <p>Annex viii. Special arbitration</p> <p>Annex ix. Participation by international organizations</p>	
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**Recommended Books (Latest Editions):**

1. United Nations Convention on the Law of the Sea, 1982: A Commentary
2. The Oxford Handbook of the Law of the Sea by Tim Stephens
3. Definitions for the Law of the Sea: Terms Not Defined by the 1982 Convention
4. Law of the Sea: UNCLOS as a Living Treaty by Jill Barrett, Richard Barnes

**Course Outcomes:**

1. The learner should have gained in depth understanding of the following and implement the regulations and laws as specified in the United Nations Convention on the Law of the Sea.
2. The learner will also have gained the knowledge on the ways to resolve and settle disputes arising,

**MAMSBRI: Book Review Term Assignment (240 Hours, 08 Credits)**

**Course Objectives:**

1. Book Review of One Book relevant to the course leading to the Final year Dissertation Based R&D Project Work.
2. Inculcate the habit of Reading, Understanding and inferring information.
3. 16 hours per week totalling to 240 Hours involving library study or engagement and mentoring by advisor with end semester report and presentation.

**Course Outcome:**

1. Book review with report and presentation will assist learner to gain in depth knowledge on specific topic and gain understanding of research undertaken in that area with an overview on the new knowledge generated.
2. Will enable the learner to develop knowledge towards the Final Year R&D Major Project.

**Semester II****MMS201: Overview of International Maritime Trade (60 Hours, 04 Credits)****Course Objectives:**

1. Educate learners about the concept and structure of Maritime Trade and its importance.
2. Impart learners about how Maritime Trade is based around Geographic availability of resources and consumers.
3. Impart knowledge to the learner on the various types of handling and transporting Commodities depending on its category.

<b>Unit</b>	<b>Course Content</b>	<b>Hours</b>
1	History of Maritime Trade	04
2	Basic Concepts and Geographies of Maritime Trade	05
3	Basics Concepts & Principles of Seaborne Trade	04
4	Types of Commodities Internationally Traded	04
5	Commercial Origins	04
6	Trades due to differences in Natural Resources	04
7	Trade Theory & Principle Drivers of Trade Demand and Supply	06
8	Types of Cargoes and their means of carriage	09

9	Ship Design & Technical Parameters - Bulk / Liquid Bulk / Gas (LPG, LNG, Ammonia) / Crude & CPP - Break Bulk :Types of Break Bulk Cargoes and their Characteristic - Automobiles / Project Cargoes - Cruise and Passenger	06+08
10	Maritime Vocabulary – On board and in Business	02
11	Commodity Trade Cycles & Trends	04

**Recommended Books (Latest Editions).**

1. Maritime Economics, By Martin Stopford (3rd Edition)
2. Port Economics (Routledge Maritime Masters), By Wayne K. Talley
3. The Handbook of Maritime Economics and Business, By Costas Grammenos
4. The Business of Shipping, By Ira Breskin

**Course Outcomes.**

The learner would have gained knowledge towards implementing the following with in depth understanding of the following:-

1. Describe what is Maritime Trade
2. Demonstrate how it is governed by geographical distribution of resources and consumers
3. Differentiate types of marine transport crafts based on commodity
4. Construct and explain a trade cycle and its importance.

**MAMS202: Maritime Power Concepts & Role in International Relations (60 Hours, 04 Credits)**

**Course Objectives:**

1. The aim of the course is to make the learner develop awareness of how strategic issues can be related to broader conceptual concerns in the field of International relations.
2. This module introduces the learner to strategic studies, a major sub fields of international relations concerned with the use of force in world politics.
3. The course interprets the traditional and contemporary uses of force for political ends.

Unit	Course Content	Hours
1	<p><b>International Relations</b></p> <p>Why Study International Relations?</p> <p>The State, Nation, Nation-States, Multi-nationalism, Nationalism &amp; Internationalism</p> <p>The Key Concepts in R: Power, National Interest, Balance of Power</p> <p>Foreign Policy: Meaning, Goals and Determinants</p>	10
2	<p><b>Concepts &amp; Theories of Land and Air Warfare</b></p> <p>Theories of land warfare with reference to mobile defence, use of tank and machine, warfare.</p> <p>Theories of Air Power</p> <p>Heartland theories</p> <p>Heartland theories based on National Power</p>	10
3.	<p><b>Introduction to Sea Power</b></p> <p>Views of A.T. Mahan on the elements of sea power and naval strategy</p> <p>Continental Doctrine of Sea Power</p> <p>Why do Nations build and maintain Navies</p> <p>To what degree does the Mahanian concept of command of sea apply today?</p> <p>How do the objectives of Naval Forces in wartime contribute to the overall war effect?</p> <p>The role of sea power in national policy and diplomacy in both peacetime and war through the present day.</p>	10
4	<p><b>Introduction to Sea Control &amp; Sea Denial</b></p> <p>Compare and contrast Sea Control to maritime security. Can Sea Control be exercised in peacetime? Why or Why not?</p> <p>What is sea control and why does one obtain it?</p> <p>What are the various degrees of sea control and how do you differentiate between them?</p> <p>How are terms “Sea Control” and “Sea Denial” related?</p> <p>Discuss the man methods used by opposing sides to obtain, maintain, exploit, deny and dispute sea control. How does a commander balance obtaining and maintaining sea control with risk?</p>	10
5	<p><b>Working Together</b></p> <p>Mahan’s Naval Strategy</p> <p>Effects of Maritime Policy on Global Stability.</p>	10

	<p>Importance of Joint Warfare and Power Projection.</p> <p>How did Land and Maritime objectives differ? Were they mutually supporting and exploiting sea control?</p> <p>Are Land based forces more important than maritime operating environment (political/ legal, military, social, economic, environmental, etc.) enable or constrain the operational planner?</p>	
6	<p><b>Indian Ocean and India's Security Consideration</b></p> <p>Strategic mileu in and around the Indian Ocean Region</p> <p>India's Security problems in relation to IOR</p> <p>India's Maritime Security and its needs for Naval Power Projection</p>	05
7	<p><b>India's Foreign Policy</b></p> <p>India and its Maritime Neighbours</p> <p>SAGAR</p> <p>IPOI</p> <p>India's Maritime Relations with USA, Russia, France, UK, China, Israel, EU, ASEAN</p>	05

**Recommended Books (Latest Editions):**

1. Mahan, Alfred T. The Influence of Sea Power Upon History 1660-1783, Boston: Little, Brown and Company. 1898
2. Corbett, Julian S. Some Principles of Maritime Strategy. London, UK: Longmans, Green and Co., 1918.
3. Dombroski, Peter, ed. Naval Power in the Twenty-First Century: A Naval War College Review Reader. Newport, RI: Naval War College Press, 2005. (NP24WEB.pdf)
4. Till, Geoffrey. Sea Power : A guide for the Twenty-First Century, New York: Routledge, 2013. Read pp.144-156
5. Hattendorf, John B. "Sea Power and Sea Control in Contemporary times" in Naval History and Maritime Strategy: Collected Essays. Malabar, FL: Krieger Publications, 2000.

**Course Outcomes:**

The learner should have gained knowledge and will be able to understand the following:-

1. The importance of International Relation and the factors influencing.
2. The concept and theories of Land, Air and Sea Powers.
3. In-depth knowledge on what is Sea Control and Sea Denial and its deference along with the international regulations.

- An understanding of India's foreign Policy.

**MAMS203: India's Maritime History and Heritage (60 Hours, 04 Credits)**

**Course Objectives:**

- The main objective of this course is to create awareness and interest among the learners of the rich maritime traditions of India.
- Aims at the learner understand India's place in the networks of Asian-Oceanic world from pre- Christian era.
- To explain the learner on the shipping practices, mercantile trade and political relations of India with other countries from ancient to modern times.

<b>Unit</b>	<b>Course Content</b>	<b>Hours</b>
1	Geography: Coastline, Trade Winds, The Arabian Sea Littoral, The Bay of Bengal Littoral	05
2	Indigenous Shipping Practices for Control over the Seas Ancient: Pallavas, Cholas and Rulers of Malabar Coast, Mauryan Navy Medieval: Mughals, Marathas, Marthanda Varma, Zamorin of Calicut, Siddiss of Janjira and Angres Modern: The European Encounter	12
3	Mercantilism: the Impetus behind Mercantile Trade, Merchant Communities, Merchants, brokers, shippers	03
4	Historic trade Contacts: Harappa, Roman Empire, China, Arabs and Chola	06
5	European and Indian Maritime Trade: Portuguese, Dutch, English, French, Intra-European Rivalries and Maritime Trade	06
6	Growth of Ports and Towns Ancient – Harappa Sites, West Bengal Sites, Western Deccan Coast (Tamralipti – Navadweep – Machalipatnam – Nagapatnam – Kaveripatnam – Malabar Coast – Mangalore – Honnavar – Bhatkjal and Barakur – Kalyan and Broach) Medieval : Chaul, Surat, Cochin, Masulipattanam Hinterland: Cambey, Surat, Chaul, Goa, Cochin, Masulipatnam Modern: Calcutta, Bombay, Madras, Pondicherry	10

	Commercial development of Bombay Port	
7	Pioneers of Indian Shipping: Sri Walchand Hirachand, Shri Narottam Morarjee, Etc	02
8	The Bombay Mutiny, Liberation of Goa, Role of Indian Navy in Liberation of Bangladesh	04
9	History of Modern Ship Yards Naval Dockyard Mumbai – Hindustan Shipyard – Cochin Shipyard – Mazagoan Docks – Garden Reach Shipyards – Goa Ship Yard	04
10	Privatisation of Ship Yards and Ship Building in India	02
11	Indian Navy: Pre and Post Independence	08

**Recommended Books (Latest Editions).**

1. Arasaratnam, S, ,, Maritime India in the 17<sup>th</sup> Century,” New Delhi, 1944
2. Arasarathnam S and Ray Aniruddha, Masulipatnam and Cambay, 1500-1800, New Delhi 1994
3. Arunachalam B, Essays in Maritime Studies, Mumbai 1998
4. Arvind Sinha, “ The politics of Trade, Anglo French Commerce on the Coromandel Coast 1763-1793”, New Delhi 2002
5. Banga Indu, ed, Ports and their hinterland in India, Manohar, New Delhi 1992
6. Barendse R.J., The Arabian Seas, Vision Books, New Delhi, 2002
7. Bhaskar Chattopadhyaya, An Introduction to the Maritime History in India: with special reference to the Bay of Bengal (pre-modern period), Punthi Pustak, 1994
8. Chakravarti Ranabired, „Trade in Early Indi,” New Delhi,
9. Chaudhary Sushiland Michael Morineau, eds., Merchants, 1500-18--, compiled by Uma Das Gupta, Oxford University Press, 2001
10. Chaudhuri, K.N., Trade and Civilisation in the Indian Ocean: An Economic History from the Rise of Islam to 1750, Cambridge University Press, 1984
11. Curtin, P., Cross-Culture trade in the World History, Cambridge University Press, 1984
12. Das Gupta Ashin, The worl of Indian Ocean Merchants, 1500-1800, Compiled by Uma Das Gupta, Oxford University Press, 2001
13. Das Gupta A, Malabar in Asian Trade 1740-1800, Cambridge University Press 1967
14. Das Gupta A and Pearson M.N. India and Indian Ocean, 1500-1800 OUP 1987
15. David M.D., Bombay, The City of Dreams, reprint, Himalaya Publishers, Mumbai 1998

16. Mathew K.S, Portuguese Trade with India in the Sixteenth Century, Manohar, New Delhi, 1993
17. Mathew K.S., ed., Shipbuilding and Navigation in the Indian Ocean region, New Delhi, 1997
18. Sridharan K, A Maritime History of India, Govt of India Publications, New Delhi, 1992
19. Subramaniam Lakshmi, Medieval Indian Seafarers, Roli Books, New Delhi, 1999
20. Subramaniam, Lakshmi (ed.), Ports Towns Cities, A historical Tour and Settlement in the Bay of Bengal, 1500-1700, OUP, 1990
21. Subrahmanyam, S., Improvising Empire: Portuguese Trade and Settlement in the Bay of Bengal, 1500-1700, OUP, 1990
22. Winus George D. and Vink Marcus P., The Merchant-Warrior Pacified: The VOC (The Dutch East India Co) in India, Oxford University Press, 1991
23. Ray Indrani, The French East India Company and the Trade of the Indian Ocean, Collection of Essays, ed., L. Subramaniam, New Delhi, 1999
24. Robert Greenhalgh Albinion, Naval & Maritime History: an annotated bibliography – 1972
25. Holden Furber, Sinnappah Arasaratnam, Kenneth McPherson, Maritime India, Oxford University Press, 2004
26. Christopher Lloyds, Atlas of Maritime History, Arco Pub, Co., 1975

### **Course Outcomes.**

The learner should have gained understanding and knowledge on the following:-

1. The Geographic positioning of India on the world map with significant sea control from Ancient to Modern Times.
2. Methods and concepts followed by various Indian Empires to maintain Sea Control and Power.
3. Growth of Ports and towns along with the Maritime Trade practices from Ancient times.
4. Ship building and maritime technology being followed by the maritime Indian empires.

### **MAMS204E: Maritime Security Challenges in Indo-Pacific (60 Hour, 04 Credits)**

#### **Course Objectives:**

1. Impart knowledge to the on Transnational Maritime Security and Maritime Security concepts.
2. Impart knowledge on the prevailing Geopolitical, Goeconomics and Security in the Indo-Pacific and its effect on Maritime Security.
3. Acquaint the learner with the prevailing Maritime Threats in the Indo-Pacific and the Threat by China.



4. Acquaint the learner about the effect of various threats on the countries in the Indo-Pacific and the roll of maritime countries.

Unit	Course Content	Hours
1	Definition of “Transnational Maritime Security”: Idea of an inclusive “Maritime Security Matrix” consisting of national security, marine environment, economic development and human security	03
2	Defining the Indo Pacific – Geopolitical context, geoeconomics context, security context New Perspective on Indo-Pacific Maritime Security	03
3	<p><b>Addressing Maritime Security</b></p> <p>Traditional</p> <ul style="list-style-type: none"> <li>Choke Points and their strategic importance</li> <li>Piracy, floating armouries, SLOCS, military presence</li> <li>Coastal Security</li> </ul> <p>Non-traditional</p> <ul style="list-style-type: none"> <li>IUU fishing, illegal migration, human trafficking</li> <li>Security of Ports, Harbours, Fishermen</li> </ul> <p>Other factors as a security challenge</p> <ul style="list-style-type: none"> <li>Climate Change – Floods, Cyclones, Tsunami, Earthquakes, HARD, Sea Level Rise</li> <li>Global Supply Chain Vulnerabilities, Environmental Security Challenges, Marine Pollution</li> </ul>	06
4	<p><b>Maritime Security Threats in the Indo-Pacific Region :</b></p> <ul style="list-style-type: none"> <li>Military warfare</li> <li>Economic Warfare</li> <li>Piracy and Robbery</li> <li>Terrorism and Aggression</li> <li>Illegal Fishing</li> <li>Environmental destruction,</li> <li>Illegal seaborne immigration</li> <li>Sovereignty Disputes</li> </ul>	06
5	<b>Threat of China to the Asia Pacific countries and Indian interests in the Indian Ocean.</b>	06

	<p>Understanding China's Maritime Policy: 21<sup>st</sup> Century Silk Road</p> <p>China – Overcoming the Malacca Dilemma</p> <p>China's hold over Hambantota port (Sri Lanka),</p> <p>Supplying military equipment to India's neighbours such as submarines to Myanmar, frigate to Sri Lanka, equipment to Bangladesh and Thailand, thus colonising the region, dividing ASEAN.</p>	
6	<p><b>Maritime threats affecting the lives of coastal communities:</b></p> <p>Sea-level rise</p> <p>Increase in the frequency and severity of natural disasters</p> <p>A mounting volume of marine debris</p> <p>Losses of biodiversity.</p>	04
7	<p>Diplomacy, Intervention and Cooperation among nations to reduce the maritime security threats</p>	04
8	<p><b>Institutional Frameworks to mitigate the risks posed by security threats. Their effectiveness and limitations</b></p> <p>The Association of Southeast Asian Nations (ASEAN) : East Asia Summit (EAS) and ASEAN Regional Forum (ARF).</p> <p>The South Asia Association for Regional Cooperation (SAARC)</p> <p>The role of QUAD in the Indo-Pacific</p> <p>Joint Indian Naval Exercises with foreign navies – Malabar, Milan, Konkan, IBSAMAR, JIMEX, Indra, Varuna</p>	06
9	<p><b>Need for Maritime Governance and Security Architecture :</b></p> <p>International Law : 1982 United Nations Convention on the Law of the Sea (UNCLOS).</p> <p>India Initiatives : Open Indo-Pacific (FOIP) idea, Security and Growth for All in the region (SAGAR) and the Indo-Pacific Oceans Initiative (IPOI).</p>	04
10	<p><b>Changes in the Indo-Pacific Security Order</b></p> <p>India's View of Indo Pacific</p> <p>The evolving security order in the Indo-Pacific</p> <p>The limits to Maritime Security Collaboration in the Indo-Pacific</p>	04
11	<p><b>The Role of Maritime Nations in the Indo-Pacific Security</b></p>	10

	<p>The Roll of Japan – Security, Capacity Building</p> <p>The role of Australia – Security, Capacity Building, Blue Economy</p> <p>The role of ASEAN – Security</p> <p>The Role of India – Security, Capacity and Capability Building, Blue Economy</p> <p>Indian Ocean Rim – Association for regional Cooperation (IOR-ARC)</p> <p>Bangladesh, India, Myanmar, Sri Lanka, Thailand Economic Cooperation (BIMST- EC)</p>	
12	<p><b>The future of Indo-Pacific Region</b></p> <p>Challenges and Opportunities</p> <p>Free and Open Indo-Pacific</p> <p>Inter-government organisations in the Indo-Pacific</p> <p>Indo-Pacific Ocean Initiative</p>	04

**Recommended Books (Latest Editions).**

1. Anil Kumar Singh, “India’s Security Concerns in the Indian Ocean Region”, Har-Anand Publications, 2003
2. David Michel, Russell Sticklor (Ed.), “ Indian Ocean Rising: Maritime Security and Policy Challenges”, published by Stimson, Washington, 2012
3. James R Holmes, Andrew C., “Indian Ocean and India’s Security”, Winner, Toshi Yoshihara Routledge, New Delhi, 2009.
4. Khurana, G.S, “ Maritime Security in the Indian Ocean: Convergence Plus Cooperation Equals Resonance”, Journal of Strategic Analysis, Vol. 28, No 3, Jul-Sep 2004, Institute for defence Studies and Analyses, New Delhi
5. John Garfoano, Andrea J. Dew, “Deep Currents and Rising Tides: Indian Ocean and International Security”, Georgetown University Press, 2013
6. Minister of Defence (Navy), “Ensuring Secure Seas: Indian Maritime Security Strategy”, Indian Navy Naval Strategic Publication Oct 2015
7. Mohan Malik (Ed), “Maritime Security in the Indo-Pacific: Perspectives from China, India and United States”, Published by Rowman & Littlefield, United Kingdom, 2014
8. Qamar Fatima, Asma Jamshed, “The Political and Economic Significance of Indian Ocean: An Analysis” Journal of South Asian Studies, vol 30, No. 2, July-December 2015.
9. Rahul Roy Chaudhury, “India’s Maritime Security” Knowledge World Publications, New Delhi, 2000
10. Raj Narain Misra, “Indian Naval Strategy in the 21<sup>st</sup> Century” Mittal Publications, New Delhi, 1986.

11. Sarabjeet Singh Parmar, "Maritime Security in the Indian Ocean: An Indian Perspective", Journal of Defence Studies, Vol 8, No. 1, January-March 2014, Institute for Defence Studies and analyses, New Delhi.
12. Satish Chandra, P.V. Rao eds., "India and Indian Ocean: In the twilight of the millennium", Osmania University, CIOS, Hyderabad, 2003
13. Sharma, O.P., "International Law of the Sea", Oxford University Press, New Delhi, 2009
14. Thean Potgieter, "Maritime Security in the Indian Ocean: Strategic Settings and Features", Published by Institute for Security Studies, Paper No 236-August 2012, South Africa.
15. V.R. Raghavan, Lawrence W. Prabhakar, "Maritime Security in the Indian Ocean Region: Critical Issues in Debate", Tata McGraw-Hill Publishing Company, New Delhi.

**Course Outcomes.**

The learner should have gained understanding, knowledge and be able to advice the policy makers on the following:-

1. The prevailing Geopolitical, Geoeconomics and Maritime security in the Indo-Pacific.
2. The Roll of Maritime Nations and there influence and threats in the Indo-Pacific
3. The roll of India in maintaining a conducive environment in the Indo-Pacific.
4. The present and future developments with respect to Maritime Security and its effects in the Indo-Pacific.

**MAMS205E: Maritime Shipping, Navigation and Salvage Law (60 Hours, 04 Credits)**

**Course Objectives:**

1. Impart to learner thorough understanding of Navigation and Salvage laws.
2. Impart knowledge to the learner on the right to salvage arises and the nature of a salvage agreement. Understand the Lloyds Open Form of Salvage Agreement (LOF) 2000.
3. Understand the manner in which salvage arbitration and litigation determines the amount to be paid to the salvors.
4. To make aware the learner of international pollution conventions on salvage awards. Be aware of the application of the International Convention of Salvage 1989.
5. To impart knowledge on the various export import operations in port, with agencies involved and their functions.

Unit	Course Content	Hours
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1	<b>Admiralty Jurisdiction:</b> Introduction, Meaning, Origin, Development of Admiralty matters in India, Admiralty jurisdiction; Composition. Methods of enforcement of maritime liens & arrest, Admiralty (Jurisdiction & Settlement of Maritime Claims) Act, 2017 salient points.	06
2	<b>Torts in Shipping and Defences against Tortious Liability :</b> Introduction; Types of Torts; Duty of care; Breach of duty; Defendant's breach caused the damage; Case Laws; Negligence of the Master/Ship's personnel; Vicarious liability; Tort actions against carriers; Misrepresentation; Pre-contractual misrepresentations; Background of the Himalaya clause; Remedies & Limitation; Defences against Tortious liability; Limitation of Action; Contributory negligence – in Admiralty.	06
3	<b>Suppression of Unlawful Acts against the Safety of Maritime Navigation:</b> League of nations; Harvard draft; UNCLOS 1982; Convention for Suppression of Unlawful Acts Against the Safety of Maritime Navigation 1988 [SUA Convention] and The Protocol of 1988; Piracy Bill 2012.	06
4	<b>Salvage Laws:</b> Introduction to Salvage History of Salvage Laws The Legal Background Salvage laws in different nations Linkage to Maritime Insurance Types of Salvage Operations Assessment of reward of Salvage Salvage Under Contract Compensation for preventing and minimising danger to environment Time limit to claim the salvage International Salvage Convention 1989, of 2000, SCOPIC : Definition; Principles of Salvage, Maritime property; Crew; Passengers, Salvage Agreements; Lloyd's standard form; Salvage Convention 1989; Development of SCOPIC (Special Compensation P&I Clause); Advantages & Disadvantages of SCOPIC; The role of SCI (Special Casualty Representative); SCOPIC in practice; Lloyd's Standard Form of Salvage Agreement (LOF 2000).	12
5	<b>The Indian Ports Act, 1908 :</b> Introduction; Salient features, Port officials & their powers & duties; Port Health Officer; Port dues & other charges; Harbour master's function; Pilotage; Tugboat operations; Mooring services; Vessel traffic	06

	service & aids to navigation; Other marine services performed by port authorities; Emergency services; Dredging.	
6	<b>Merchant Shipping Act, 1958</b> and Amendment of 1986: Introduction/Definition; Registration of ships; Collisions; Collision & Limitation of Liability of ship owners; Wreck & Salvage; Civil Liability for Oil pollution damage; Prevention & Containment of pollution of Sea by oil; Investigations & Inquiries.	06
7	<b>Customs Act, 1962</b> : Provisions relating to ships carrying imported/exported goods; Vessels carrying coastal goods; Power to stop & search vessels; Power to confiscate vessel; Penalty for not accounting for goods; Punishment for evasion of duty prohibitions	06
8	<b>The Indian Light Houses Act, 1927</b> : Introduction; Definitions, Local Light Houses, Light dues, Receipts for Light dues; Ascertainment of tonnage; Recovery of lighthouses expenses & costs; Refusal of port clearance; Exemption from payment of light dues.	06
9	<b>The Inland Vessels Act, 1917 &amp; Amendments</b> : Introduction; Survey of Inland mechanically propelled vessels; Registration of Inland mechanically propelled vessels; Masters (including Serang) and Engineers (including Engine Drivers) of Inland mechanically propelled vessels; Investigation & Casualties; Protection of, and Carriage of Passengers in Inland (Mechanically propelled) vessels; Penalties & Legal Proceedings.	06

**Recommended Books (Latest Editions).**

1. The Outline of Maritime Law by Dr S.P. Gupta
2. Maritime Jurisdiction and Admiralty Laws in India by Samareshwar Mahanty
3. The Law of Contract -- N. Chandiramani, 1st Ed. 1996-97 (Sapt).
4. Mulla on The Indian Contract Act -- H.S. Pathak, 11th Ed. 1995 (Tripathi).
5. Shipping Law Handbook --- Michael Bundock 4th/2007 (Informa)
6. COGS & Multimodal Transport -- N. Chandiramani, 1st Ed. 1997 (Sapt).
7. Bills of Lading -- Capt. D.E. Driver, 2nd Ed. 1995 (Navaneet).
8. Law of Contract -- Cheshire, 8th Ed. 1974 (Butterworth).
9. Anson's Law of Contract -- A. Ghest, 23rd Ed. 1969 (OUP).
10. Maritime Law -- C. Hill, 2nd Ed. 1985 (LLP).
11. Shipping Law -- Chorley & Giles, 8th Ed. 1987 (Pitman).

12. Shipping & the Law -- A.E. Astle, 1st Ed. 1980 (Fairplay).
13. Maritime Law of India -- Dr. Nagendra Singh, 1st Ed. 1979 (Bhandarkar).
14. Maritime Liens -- D.R. Thomas, 1st Ed. 1980 (Stevens).
15. The Merchant Shipping Act, 1958 -- Bare Act 2003 (Professional Book)\*
16. The Outlines Of Maritime Law -- Dr. Sant Prasad Gupta 1st/2004 (Allahabad Law Agency)\*
17. Shipping Law -- Simon Baughen 3rd Ed. 2004 (Cavendish)\*
18. Merchant Shipping In India -- B.C. Mitra 2000 (The University Book Agency)\*
19. Maritime Jurisdiction And Admiralty Law Of India – Samareshwar Mahanty 2009(Universal Law)\*
20. A Guide To Customs Act, 1962 -- Dr Nilima M Chandiramani 1st Ed. 2000 (Avinash\*)
21. Law Of Contract And Specific Relief -- Dr. Avtar Singh 10th/Ed. 2008 (Eastern Book Co)\*
22. The Merchant Shipping Act, 1958 -- Bare Act 2010 (Universal )\*
23. Manual Of Merchant Shipping Laws -- D.S. Shukla 4th/2012 (Dwivedi Law)\*
24. Shipping Law Handbook Michael Bundock 4th Ed. 2007 (Informa)\*
25. The Merchant Shipping Act, 1958 -- Akalank 2nd Ed. 1998 (Akalank)\*

### **Course Outcomes.**

The learner would have acquired knowledge and understanding on the following for effective implementation:-

1. Navigation and Salvage laws.
2. Right to salvage arises and the nature of a salvage agreement and Lloyds Open Form of Salvage Agreement (LOF) 2000.
3. Salvage arbitration and litigation determines the amount to be paid to the salvors.
4. International pollution conventions on salvage awards. Be aware of the application of the International Convention of Salvage 1989.
5. Various export import operations in port, with agencies involved and their functions.

### **MAMSMP: Mini Term Project (240 Hours, 08 Credits)**

#### **Course Objectives.**

1. To impart the learns with the need and methods to carryout case study, field work, data collection, data analysis, laboratory experimentation leading to Dissertation Based R&D Project Work with end semester report and presentation.
2. The learner will be guided to develop knowledge on the Topic of Research chosen relevant to the course.
3. 16 Hours per week will be allocated to carry out the research activity.

### Course Outcome.

After successful completion of the Mini Term Project the learner will be able to:-

1. Demonstrate, analyse, compare, evaluate subject data and can develop aptitude in field work, data collection, problem analysis and solving using technical and statistical concepts.
2. Would have gained knowledge in the area of research there by submitting relevant recommendations and inferring conclusions.

### Semester III

#### MAMS301: India's Maritime Doctrine and Strategy (60 Hours, 04 Credits)

#### Course Objectives:

To orient and introduce the learners on the various aspects of India's maritime doctrine and strategy.

Unit	Course Content	Hours
1.	Evolution of Maritime Thinking <ul style="list-style-type: none"><li>• Mahan</li><li>• Corbet</li><li>• Pannikar</li></ul>	02
2.	Maritime Security: Imperatives and Influences <ul style="list-style-type: none"><li>• Maritime Geography</li><li>• Maritime Neighbours</li><li>• Maritime Relations</li><li>• Maritime Economy</li><li>• Overseas Interests</li><li>• Traditional and Non-traditional threats to security</li></ul>	02
3.	Maritime Doctrine and Strategy in Perspective <ul style="list-style-type: none"><li>• Historical Preview</li><li>• What is Doctrine?</li><li>• National Security Concepts and Military Doctrine</li><li>• National Aim and Interests</li><li>• National Security Objectives and Policy</li><li>• Levels of Doctrine</li><li>• Maritime Power, Strategy and Doctrine</li><li>• Navy and Maritime Doctrine</li><li>• Indian Maritime Doctrine</li></ul>	04



Unit	Course Content	Hours
4.	The Spectrum of Conflict <ul style="list-style-type: none"> <li>• Peace, Security and Stability</li> <li>• Cooperation, Competition and Confrontation</li> <li>• Conflict and Combat</li> <li>• Subversion</li> <li>• Terrorism and Insurgency</li> <li>• Guerrilla Warfare</li> <li>• Civil War</li> <li>• Intervention</li> <li>• Limited and Total War</li> <li>• Levels of War</li> <li>• Purpose of War</li> </ul>	05
5.	Concepts of War <ul style="list-style-type: none"> <li>• Attributes of War</li> <li>• Concepts Related to Use of Force</li> <li>• Laws of Armed Conflict</li> </ul>	03
6.	Principles of War <ul style="list-style-type: none"> <li>• Selection and Maintenance of Aim</li> <li>• Offensive Action</li> <li>• Concentration of Force</li> <li>• Economy of Effort</li> <li>• Flexibility and Management of Change</li> <li>• Surprise</li> <li>• Cooperation and Synergy</li> <li>• Logistics</li> <li>• Security</li> <li>• Morale</li> <li>• Intelligence</li> </ul>	06
7.	Concepts of Maritime Power <ul style="list-style-type: none"> <li>• Attributes of Maritime Forces</li> <li>• Maritime Command and Control</li> <li>• Maritime Domain Awareness</li> <li>• Network Centric Operations</li> <li>• Sea Control</li> <li>• Battle-space Dominance</li> <li>• Sea Denial</li> <li>• Fleet-in-Being</li> <li>• Littoral Warfare</li> <li>• Maritime Manoeuvre</li> <li>• Amphibious Operations</li> <li>• Expeditionary Operations</li> <li>• Distant Operations</li> <li>• Trade Warfare</li> </ul>	10

Unit	Course Content	Hours
	<ul style="list-style-type: none"> <li>• Convoy</li> <li>• Blockade</li> <li>• VBSS Operations</li> <li>• Exclusion Zones</li> <li>• Maritime Logistics</li> </ul>	
8.	Military Roles of the Indian Navy <ul style="list-style-type: none"> <li>• Objectives, missions and tasks</li> <li>• Strategy for Deterrence</li> <li>• Strategy for Conflict</li> </ul>	03
9.	Diplomatic Roles of the Indian Navy <ul style="list-style-type: none"> <li>• Objectives, missions, and tasks.</li> <li>• Strategy for shaping a favourable and positive maritime environment</li> </ul>	02
10.	Constabulary Roles of the Indian Navy <ul style="list-style-type: none"> <li>• Objectives, Missions, Tasks</li> <li>• Strategy for Coastal and Offshore Security</li> </ul>	02
11.	Benign Roles of the Indian Navy <ul style="list-style-type: none"> <li>• Objectives, Missions, Tasks</li> <li>• Strategy for shaping a favourable and positive maritime environment</li> </ul>	02
12.	Naval Combat Power <ul style="list-style-type: none"> <li>• Conceptual Component</li> <li>• Physical Component</li> <li>• Human Component</li> <li>• Strategy for Maritime Force and Capability Development</li> <li>• Indian Navy's Indigenisation Plan/ Naval Aviation Indigenisation Roadmap</li> </ul>	04
13.	Planning Maritime Operations <ul style="list-style-type: none"> <li>• Operational Readiness Planning</li> <li>• Operational Response Planning</li> <li>• Concepts of Military Operations</li> <li>• Concepts of Operational Art</li> <li>• Concepts of Operational Planning</li> <li>• Operational Planning Process</li> </ul>	04
14.	Role of the Coast Guard <ul style="list-style-type: none"> <li>• Benign Roles</li> <li>• Constabulary Roles</li> <li>• Environmental Roles</li> </ul>	03
15.	Joint Doctrine Indian Armed Forces <ul style="list-style-type: none"> <li>• Concepts of military power application</li> <li>• Joint Operations</li> <li>• Higher Defence Organisation</li> <li>• Integrated and Joint Structures</li> <li>• Technical Orchestration and Capability Development</li> </ul>	04

Unit	Course Content	Hours
16.	Maritime Security and Strategy: Global Contexts <ul style="list-style-type: none"> <li>• Australia</li> <li>• China</li> <li>• France</li> <li>• US</li> <li>• UK</li> </ul>	04

**Recommended Books (Latest Editions).**

1. Joint Doctrine Indian Armed Forces, HQIDS
2. NSP 1.2: Ensuring Secure Seas: India's Maritime Security Strategy, IHQ MoD(N).
3. NSP 1.1: Indian Maritime Doctrine, IHQ MoD(N).
4. Blue Waters Ahoy: The Indian Navy 2001-10, IHQ MoD(N)
5. Indian Naval Indigenisation Plan , IHQ MoD(N)
6. Naval Aviation Indigenisation Roadmap, IHQ MoD (N)
7. Role of the Coast Guard in the Maritime Security of India, Prabhakaran Paleri, Knowledge Word India.

**Course Outcomes.**

The learner would have gained knowledge on the Indian Maritime Doctrine and following:-

1. Understand the relationship between doctrine, strategy and policy.
2. Describe the key elements of India's maritime doctrine and its relationships with other doctrines.
3. Describe the essential attributes of India's maritime security strategy.
4. Compare Indian doctrine and strategy with other global doctrines and strategies.

**MAMS302: Maritime Laws in India (60 Hours, 04 Credits)**

**Course Objectives:**

1. To impart knowledge to the students on the important laws passed by the Govt of India with relevance to Shipping, Ports, Fisheries, Maritime Security and Environment related.
2. To impart knowledge to the learner on the commonalities and implementation of International Maritime Laws in the Indian Maritime Sector.

Unit	Course Content	Hours
1.	Domestic Implementation on International Maritime Law in India <ul style="list-style-type: none"> <li>• Relation between International Law and Domestic Law</li> <li>• India and International Law</li> <li>• The Indian Constitution and International Law</li> <li>• Treaty making and implementation in India</li> </ul>	06
2.	India and the UN Convention of the Sea <ul style="list-style-type: none"> <li>• Historical Background: India and the UN Convention of 1982</li> <li>• Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act, 1976</li> </ul>	04
3.	Laws in the Shipping Sector <ul style="list-style-type: none"> <li>• Coasting Vessels Act, 1838</li> <li>• Indian Bill of Lading Act, 1856</li> <li>• Indian Vessels Act, 1917</li> <li>• Lighthouse Act, 1927</li> <li>• Indian Carriage of Goods by Sea Act, 1925</li> <li>• Merchant Shipping Act, 1958</li> <li>• Marine Insurance Act, 1963</li> <li>• Multimodal Transportation of Goods Act, 1993</li> <li>• Admiralty (Jurisdiction and Settlement of Maritime Claims) Act, 2017</li> <li>• Recycling of Ships Act, 2019</li> </ul>	14
4.	Laws in the Port Sector <ul style="list-style-type: none"> <li>• Indian Ports Act, 1908</li> <li>• Major Ports Authority Act, 2021 Maharashtra Maritime Board Act, 1996</li> <li>• Indian Port Health &amp; Indian Port Health Rules 1955</li> </ul>	06
5.	Laws in the Offshore Sector <ul style="list-style-type: none"> <li>• Oilfields (Regulation and Development) Act, 1948</li> <li>• Petroleum and Natural Gas (Safety in Offshore Operations) Rules, 2008</li> <li>• Offshore Wind Policy, 2015</li> </ul>	06
6.	Laws in the Fisheries Sector <ul style="list-style-type: none"> <li>• Marine Products Exports Development Act, 1972</li> <li>• State Marine Fisheries Regulation Act (MFRA)/ Maharashtra Marine Fishing Regulation Act, 1981</li> <li>• Coastal Aquaculture Authority Act, 2005</li> </ul>	06
7.	Legal Framework for Maritime Security in India (Principal Legislations) <ul style="list-style-type: none"> <li>• <i>Maritime Terrorism</i>: Suppression of Unlawful Acts against Safety of Maritime Navigation and Fixed Platforms on Continental Shelf, 2002</li> <li>• <i>Piracy</i>: UNCLOS/ Anti-Maritime Piracy Bill, 2019</li> <li>• <i>Illegal Unreported and Unregulated Fishing</i>: Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Act, 1981 (MZI Act, 1981); Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Rules, 1982; State Marine Fisheries Regulation Acts/ Maharashtra Marine Fishing Regulation Act, 1981</li> <li>• <i>Smuggling</i>: Customs Act, 1962</li> <li>• <i>Drug Trafficking</i>: Narcotic Drugs and Psychotropic Substances Act, 1985</li> </ul>	12

Unit	Course Content	Hours
	<ul style="list-style-type: none"> <li>• <i>Maritime Law Enforcement: Coast Guard Act, 1978</i></li> </ul>	
8.	Marine Environmental and Biodiversity Protection <ul style="list-style-type: none"> <li>• Merchant Shipping Act, 1958</li> <li>• Air (Prevention and Control of Pollution) Act, 1981</li> <li>• Environment Protection Act, 1986</li> <li>• Wildlife (Protection) Act, 1972</li> <li>• Biodiversity Act, 2002</li> <li>• Coastal Regulation Zone Notification, 2019</li> </ul>	10

**Recommended Books (Latest Editions):**

1. The International Law of the Sea: India and the UN Convention of 1982, OP Sharma, Oxford.
2. Introduction to the Constitution of India, Durga Das Basu, Lexis Nexis
3. Role of the Coast Guard in the Maritime Security of India, Knowledge World International

**Course Outcomes:**

The learner will have exposure to all major maritime laws in India with emphasis on the following:-

1. Understand the relationship between international and municipal law.
2. Develop a basic understanding of the legal framework governing maritime sectors in India.
3. Understand the legal framework for maritime security in India.

**MAMS303: Maritime Strategic Environment and Geopolitics in the Indian Ocean Region (60 Hours, 04 Credits)**

**Course Objectives:**

1. Impart knowledge to the on Maritime Security concepts in the IOR.
2. Impart knowledge on the prevailing Geopolitical, Geoeconomics and Security in the Indian Ocean Region and its effect on Maritime Security.
3. Acquaint the learner with the prevailing Maritime Threats in the Indian Ocean Region and the Threat by China.

4. Acquaint the learner about the effect of various threats on the countries in the Indian Ocean Region and the roll of maritime countries.
5. To impart advanced knowledge on the Various IOR Groups and their Role in maintaining Cooperation and Security in the IOR.

Unit	Course Contents	Hours
1	Growing Strategic Importance of Indian Ocean Region Geo-Political Significance of the IOR – Cooperation and relations among littorals Geo-Economic Importance – Oil Factor, Trade, and Transport, Presence of Natural Resources Wealth Sea Lines of Communication (SLOCs) Interest and Influence of Extra Regional Powers in Indo- Pacific Region Regional Powers Interest in IOR (China’s interest in the South China Sea, India’s strategic Maritime Security Interest in the IOR)	10
2	<b>China’s increasing presence in the region</b> <ul style="list-style-type: none"> <li>• <b>Myanmar:</b> KYUMPL port provides pipe line for importing oil and gas from Middle East and Africa, via Myanmar</li> <li>• <b>Pakistan:</b> Gwadar port is already operational serving as a transportation route to landlocked Afghanistan and also to China</li> <li>• <b>CFPEC:</b> One belt One road</li> <li>• <b>Srilanka:</b> China’s investment in Hambantota Port</li> </ul>	15
3	<b>India’s efforts in IOR</b> <ul style="list-style-type: none"> <li>• Chabahar Port of <b>Iran</b> in Oman sea: For Afghanistan and also INSTC</li> <li>• Kaladan River Project in <b>Mayanmar</b></li> <li>• Inland Waterway Agreement with <b>Bangladesh</b></li> <li>• East Coast Terminal in <b>Colombo</b></li> <li>• Sabang Port in <b>Indonesia</b></li> </ul>	15
4.	<b>Sub Groups of the Indian Ocean Region and its Roll</b> <ul style="list-style-type: none"> <li>• Indian Ocean Rim Association for Regional Cooperation (IOR-ARC)</li> <li>• Indian Ocean Naval Symposium (IONS)</li> <li>• Gulf Cooperation Council (GCC)</li> <li>• South Asian Association for Regional Cooperation (SAARC)</li> </ul>	20

	<ul style="list-style-type: none"> <li>• Association of the Southeast Asian Nations (ASEAN)</li> <li>• Southern African Development Community (SADC)</li> <li>• East African Community (EAC)</li> <li>• Indian Ocean Commission (COI)</li> <li>• Arab League or League of Arab States</li> <li>• Organisation of Islamic Conference (OIC)</li> <li>• Five Power Defence Arrangements (FPDA)</li> </ul>	
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**Recommended Books (Latest Editions):**

1. Indian Ocean Region: Maritime Regime for Regional Cooperation by Manoj Gupta
2. Energy Security and the Indian Ocean Region by Sanjay Chaturvedi, Dennis Rumley
3. India's Ocean: The Story of India's Bid for Regional Leadership by David Brewster
4. Security in the Indian Ocean Region: Role of India by Rockin Th Singh
5. Africa and the Indian Ocean Region by Dennis Rumley, Timothy Doyle
6. The Security of Sea Lanes of Communication in the Indian Ocean Region
7. Power, Politics and Maritime Governance in the Indian Ocean by Jivanta Schottli
8. China in Indian Ocean Region by Manisha Mookherjee, Raparthy Sidda Goud

**Course Outcomes:**

The learner should be able to understand in depth and provide inputs to the policy makers on:

1. Maritime Security concepts in the IOR.
2. Prevailing Geopolitical, Geoeconomics and Security in the Indian Ocean Region and its effect on Maritime Security.
3. Prevailing Maritime Threats in the Indian Ocean Region and the Threat by China.
4. Various IOR Groups and their Role in maintaining Cooperation and Security in the IOR.

**MAMS304E: International Laws on Maritime Safety & Security (60 Hours, 04 Credits)**

**Course Objectives:**

To impart knowledge on various International Laws relating to Maritime Safety and Maritime Security.

Unit	Course Content	Hours
1	<p><b>Maritime Safety</b></p> <p>Rules of International Maritime Organisation – Safety of Life at Sea (SOLAS)</p> <p>International Convention for the Prevention of Pollution from Ships (MARPOL)</p> <p>International Convention for Standards of Training, Certification and Watchkeeping for Seafarers (STCW)</p> <p>International Regulations for Prevention of Collision at Sea , 1972, (COLREG)</p> <p>Convention on Facilitation of International Maritime Traffic (FAL)</p> <p>(LL)</p> <p>Search and Rescue (SAR)</p> <p>Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA)</p> <p>Convention for Safe Container (CSC)</p> <p>International Mobile Satellite Organisation (IMSO)</p> <p>Skipper Fishing Vessel (SFV)</p> <p>International Convention for Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel (STCW-F)</p> <p>Sewage Treatment Plant (STP)</p>	40
2	<p><b>Maritime Security</b></p> <p>Maritime Security &amp; UNCLOS</p> <p>Maritime Security and role of Navy and Coast Guard under UNCLOS</p> <p>Varieties of Transnational Crimes in the Maritime Domain</p> <p>Narcotics trafficking</p> <p>Piracy &amp; Armed Robbery at Sea</p> <p>Slavery, Human Trafficking and Illegal Migration</p> <p>Small Arms and Weapons of Mass Destruction</p>	20

**Recommended Books (Latest Editions).**

1. Managing Maritime Safety by Margareta Lutzhoft, Helle.A.Oltedal
2. Maritime Safety, Security and Piracy by Wayne K Talley
3. Maritime Safety and Security in Indian Ocean by Kapil Narula and Vijay Sakhuja
4. Safety of Life at Sea (SOLAS) – The Ultimate Guide by Anish
5. MARPOL: The Ultimate Guide by Raunek
6. SOLAS Consolidated Edition 2020



### **Course Outcomes.**

The learner will be made conversant and should be able to:

1. Understand International Laws pertaining to Maritime Safety
2. Understand the International Laws governing Maritime Security
3. Have in depth knowledge on regulations SOLAS, STCW, MARPOL and other conventions related to safety at sea including the fishing vessel handlers.
4. Developed a fare knowledge on the Maritime Security environment including piracy, drug trafficking and other unlawful acts in the high waters.

### **MAMS305E Maritime Trade, Labour and Environmental Laws (60 Hours, 04 hours)**

#### **Course Objectives.**

1. To educate the learner on the Indian Laws relevant to Maritime Trade, Port Handling.
2. To impart fundamental knowledge on Goods handling and transportation Laws and Legislations.
3. To familiarize the learner on the Indian Laws pertaining to Labour and Marine Environment Ecosystem.

<b>Unit</b>	<b>Course Content</b>	<b>Hours</b>
1	Law of Contract -: Introduction of Contract Act (Law of Contract), What is contract?, Capacity to contract, Free consent, Consideration & Legality of object, Agreements/Void Agreements, Offer/Proposal, Acceptance, Consideration, Privity of contract, Discharge of Contract, Remedies for Breach of Contract.	04
2	Contract of Indemnity & Contract of Guarantee: Characteristics; Rights of Indemnity-holder, Essentials of Contract of Guarantee; Distinction between Contract of Indemnity & Guarantee; Continuing Guarantee; Invalid Guarantee; Right of Surety; Liability of Surety; Discharge of Surety.	04
3	Bailment & Pledge – : Definition; Essentials of bailment; Duties of Bailor; Liabilities of Bailee; Rights of Bailee; Definition; Essentials of Pledge; Bottomry & Respondentia Bonds.	04

4	Law of Agency –: General principles, types/creation of agency, legal relationship between the parties involved, rights & duties of Agent & Principal; breach of warranty of authority; Termination of Agency; Personal liability of agents.	04
5	Indian Bills of Lading Act 1856: Introduction	04
6	Carriage of Goods by Sea Act, 1925: Purpose of enacting the Act, Application of the Act; Rights & Liabilities of carriers under the Act; In what areas does the M.S. Act 1958 overrule the Indian Carriage of Goods by Sea Act 1925.	04
7	Port & Health Regulations 1955: Introduction to Indian Port Health & Indian Port Health Rules 1955; Free Pratique;	04
8	The Sale of Goods Act, 1930: Introduction; Formation of contract; Formalities; Effect of good perishing; Conditions & Warranties; Implied conditions/warranties as to title; Implied conditions when sale by description; No implied condition/warranty as to quality or fitness; Implied conditions when Sale by sample; Transfer of property (Generic goods & Specific goods); Conditional appropriation; Performance of contract; Rights of Unpaid Seller against goods.	04
9	The Major Port Trust Act, 1963: Introduction; Definitions; Works & Services; Imposition & Recovery of rates. Amendments 2021	04
10	Multimodal Transportation of Goods Act, 1993 as Amended in 2000 : Definition; Regulation of Multimodal transportation; Multimodal transport document – Issuance, Document of title, contents, reservation, evidentiary effect, responsibility of the consignor; Responsibilities & Liabilities of Multimodal Transport Operator;	04
11	Maritime Lien : Introduction; Description/Type of claims; Claims recognized as giving rise to maritime lien; Maritime liens implied by statute; Subjects of maritime lien; Order of priorities; Priorities between competing claims or Maritime liens of the sale class; Doubtful maritime liens; Hume life; Protection of a purchaser; Position of India; Procedure for arrest.	04
12	Maritime Arbitration and Alternative Dispute Resolution Modes: Maritime contracts; Method of dispute resolution; Significant features of Arbitration & Conciliations Act, 1996; Arbitration – why, when & how, Arbitration proceedings; Arbitration Award; Advantages.	04

13	<b>National Environmental Laws, legislation and protected areas network</b> <ol style="list-style-type: none"> <li>a. Wildlife (Protection) Act 1972</li> <li>b. Environmental Protection Act 1986</li> <li>c. EIA notification 2006</li> <li>d. Forest Conservation Act</li> <li>e. Marine and Coastal Protected Areas</li> <li>f. Management framework for MPAs</li> <li>g. Integrated Coastal Zone Management</li> </ol>	12
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**Recommended Books (Latest Editions):**

1. The Law of Contract -- N. Chandiramani, 1st Ed. 1996-97 (Sapt).
2. Mulla on The Indian Contract Act -- H.S. Pathak, 11th Ed. 1995 (Tripathi).
3. Shipping Law Handbook --- Michael Bundock 4th/2007 (Informa)
4. COGS & Multimodal Transport -- N. Chandiramani, 1st Ed. 1997 (Sapt).
5. Bills of Lading -- Capt. D.E. Driver, 2nd Ed. 1995 (Navaneet).
6. Law of Contract -- Cheshire, 8th Ed. 1974 (Butterworth).
7. Anson's Law of Contract -- A. Ghest, 23rd Ed. 1969 (OUP).
8. Maritime Law -- C. Hill, 2nd Ed. 1985 (LLP).
9. Maritime Law of India -- Dr. Nagendra Singh, 1st Ed. 1979 (Bhandarkar).
10. The Indian Ports Act, 1908 -- (Government of India).
11. Major Port Trusts Act, 1963 -- A.B. Gandhi, 1st Ed. 1982 (Milan).
12. International Commercial & Maritime Arbitration -- F. Rose, 1st Ed. 1988.
13. Maritime Liens -- D.R. Thomas, 1st Ed. 1980 (Stevens).
14. The Outlines Of Maritime Law -- Dr. Sant Prasad Gupta 1st/2004 (Allahabad Law Agency)\*
15. Commentaries On Major Port Trust Act, 1963 -- Dr. B.S. Bhesania 1st Ed./2009 (Design & Processing)\*
16. Law Of Contract And Specific Relief -- Dr. Avtar Singh 10th/Ed. 2008 (Eastern Book Co)\*
17. A Practical Guide To International Arbitration In London Hilary Areilbron Q.C 3rd Ed.2008 (Informa)\*
18. Ridley's Law Of The Carriage Of Goods By Land Sea And Sea -- Brian Harris 8th Ed. /2012 (Sweet & Maxwell)\*
19. Arbitration Step By Step -- P C Markanda 2012 (Butterworth Wadhwa)\*
20. Shipping Law Handbook Michael Bundock 4th Ed. 2007 (Informa)\*
21. The Law of carriage Of Goods -- H. K. Saharay 2nd Ed. 2013(Eastern Law Book)\*
22. Law Of Arbitration & Conciliation S. K. Chawla 3rd Ed. 2012 (Eastern Law Book)\*
23. Carriage Of Goods By Sea And Multimodal Transport -- Nilima N Chandiramani 1st Ed. 1997 (Saptarang)\*

### **Course Outcomes:**

The learner would have acquired knowledge and understanding on the following for effective implementation:-

1. Maritime Trade, Labour and Environmental laws.
2. Trade arbitration and Litigation resolution.
3. Laws pertaining to Port operations.
4. Transportation of Goods and Laws governing handling of Goods.

### **MAMSBR2 Book Review Term Assignment (240 Hours, 08 Credits)**

#### **Course Objectives.**

1. Book Review of One Book relevant to the course leading to the Final year Dissertation Based R&D Project Work.
2. Inculcate the habit of Reading, Understanding and inferring information.
3. 16 hours per week totalling to 240 Hours involving library study or engagement and mentoring by advisor with end semester report and presentation.

#### **Course Outcome.**

1. Book review with report and presentation will assist learner to gain in depth knowledge on specific topic and gain understanding of research undertaken in that area with an overview on the new knowledge generated.
2. Will enable the learner to develop knowledge towards the Final Year R&D Major Project.

### **Semester IV**

#### **MAMSDP: MA (Maritime Studies) Dissertation Based Project Work (480 Hours, 24 Credits)**

#### **Course Objectives:**

MA (Maritime Studies) for Semester-IV consists of full term Dissertation Based Research Project of 24 credits. Every student will have to complete a separate project in Semester IV with twenty four credits (600 marks). Students have to prepare and submit a Master level thesis and the final evaluation will be done by external expert and Guide on the bases of the quality of the thesis and Viva-Voce examination.

**Course Outcome:**

After successful completion of **MAMSDP – MA (Maritime Studies) Dissertation Based Project Work** the learner can demonstrate, analyse, compare, evaluate subject data and can develop aptitude in field work, data collection, problem analysis and solving using technical and statistical concepts. The Learner will also be able to provide comprehensive Recommendations which could aid the industry and policy makers for incorporation and further ponder upon.