# University of Mumbai



# AAMS\_UGS /ICC/2022-23/ 71

# **CIRCULAR:-**

# Sub :- Master of Arts (Honors) (Defence and Strategic Studies)

Ref:-RB/MU-2022/CR-207/Edn-5/899, dated 18th August, 2022.

All the Principals of the Affiliated Colleges, the Head of the University Department and Directors of the recognized Institutions in Faculty of Humanities are hereby informed that the recommendations made by the Ad-hoc Board of Studies in **Defence and Strategic Studies** at its online meeting held on 2<sup>nd</sup> February, 2022 <u>vide</u> item No. 2 and subsequently passed in the faculty of Humanities and then by the Board of Deans at its online meeting held on 23<sup>rd</sup> February, 2022 <u>vide</u> item No. 5.11 (N) have been accepted by the Academic Council at its meeting held on 17<sup>th</sup> May, 2022, <u>vide</u> item No. 5.11 (N) and subsequently approved by the Management Council at its meeting held on 25<sup>th</sup> May, 2022 <u>vide</u> item No. 4 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 6773 & 6774 Regulations 9527 to 9529 and the syllabus of Master of Arts (Honors) (Defence and Strategic Studies) Sem - III & IV (CBCS) has been introduced and the same have been brought into force with effect from the academic year 2022-23, accordingly. (The same is available on the University's website www.mu.ac.in).

MUMBAI – 400 032 20<sup>th</sup> August, 2022 (Dr. Vinod Patil)
I/c. REGISTRAR

To.

The Principals of the Affiliated Colleges, the Head of the University Department and Directors of the recognized Institutions in Faculty of Humanities.

A.C/5.11(N)/17/5/2022 M.C/4/25/5/2022

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AAMS\_UGS/ICC/2022-23/

20th August, 2022

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 Defence and Strategic Studies,
- 4) The Director, Board of Examinations and Evaluation,
- 5) The Director, Board of Students Development,
- 6) The Director, Department of Information & Communication Technology,

7) The Co-ordinator, MKCL.

(Dr. Vinod Patil)
I/c. REGISTRAR

Item No 5.11

# UNIVERSITY OF MUMBAL



Particulars				
Ser	Heading	Master of Arts (Hon) (Defence and Strategic Studies) (M.A.		
1	Title of the Programme	\( \mathrea{1} \mathrea{1} \)		
	0.6773	(a) Selection of candidates will be based on nomination by the Service Headquarters based on merit.		
		(b) Any Master's Degree from a UGC recognized University.		
		(c) Or Equivalent Qualification.		
2	Eligibility for Admission 0.6774	(d) Foreign candidates should have equivalent degrees from foreign Universities recognized by Association of Indian Universities (AIU).		
		(e) The enrolment to the degree of M.A. (Hon.) will be done soon after the commencement of the Naval Higher Command Course collectively by the Naval War College.		
3	Passing Marks	40% Pass Marks		
4	Ordinances / Regulations	1 OF The A Diotonco		
5	No. of Years / Semesters	One year – (25 Weeks Contact period and 25 weeks of Distance learning in the form of Research and Dissertation writing). Officers who have already completed Naval Higher Command Course earlier and Directing Staff posted at the College of Naval Warfare will be required to follow only the distance learning phase for Dissertation writing.		
6	Level	Certificate/Diploma/UG/PG (Strike out which is not applicable)		
7	Pattern	Semester/ <del>Yearly</del> (Strike out which is not applicable)		
8	Status	Revised/New (Strike out which is not applicable)		
9	To be implemented from AY	2022 2023		

Name & Signature of BOS Chairperson:

Rear Admiral Sai Venkat Raman

Name & Signature of Dean:

Pais dum (

# Programme: Master of Arts (Honors) in (Defence and Strategic Studies) 0.6773 (M.A. (Hon.) (DSS))

1. Programme Objectives: To award M.A.(Hon.) Degree in Defence and Strategic Studies to the officers undergoing/ undergoing Naval Higher Command Course and the Directing Staff born at the College of Naval Warfare (Mumbai). The training syllabus is laid down for training of senior defence officers at strategic and operational level, fulfilling Integrated Headquarters Ministry of Defence (Navy) requirement.

# 2. Programme Outcomes.

- (a) Gained comprehensive knowledge of prevailing Maritime Security environment in the Indo-Pacific and Indian Ocean Region.
- (b) Acquired knowledge regarding International and National Maritime Laws with relevance.
- (c) Acquired knowledge regarding strategic influence of littoral and extra regional powers in the Indio-Pacific and Indian Ocean Region.
- (d) Gained insights of various initiatives and treaties in-force to maintain secure sea lines for maintaining peace and global trade.
- (e) Able to analyse and give valuable inputs to policy makers for on Maritime Laws.
- (f) Developed the nuances of operational art and the War-gaming techniques.
- (g) Prepared and be informed to effectively take up Command and Senior Staff Appointments.

# 3. Eligibility for Admission. 0.6774

- (a) Selection of candidates will be based on nomination by the Service Headquarters based on merit.
- (b) Any Master's Degree from a UGC recognized University.
- (c) Or Equivalent Qualification.
- (d) Foreign candidates should have equivalent degrees from foreign Universities recognized by Association of Indian Universities (AIU).
- (e) The enrolment to the degree of M.A. (Hon.) will be done soon after the commencement of the Naval Higher Command Course collectively by the Naval War College.

R.9527.

- 4. Intake Capacity: 80 officers or as nominated by Integrated Headquarters, Ministry of Defence (Navy).
- 5. Course Structure & Distribution of Credits.

Semester III. Semester III comprises of two theory papers with 12 credits each. Two sessions will comprise of 02 hours each. The subject details are as follows:-

SINO	Subject Code	Subject Title	Session	Cradita	Maulia
(a)	MADSS101	Maritime Strategy	125	Credits	
(b)	MADSS102-	Operational Art of Warfare		12	100
			275	12	100
		Total	400	24	200

Semester IV (M.A. (Hon) (DSS)). M.A. (Defence and Strategic Studies) Dissertation Based Research Work, 25 weeks, 24 credits, 300 marks.

M.A. (Defence and Strategic Studies) for Semester IV consists of full term Dissertation Based Research Project of 24 credits. Every student will have to complete a separate project with 24 credits totaling 300 marks. Students would be required to prepare and submit a Master level thesis and the final evaluation will be done by a panel comprising of an Expert, Guide and a DS nominated at Naval War College on the bases of the quality of the thesis and Viva-Voce examination. This Semester will be a non-contact phase of the programme, with online contact programmes as necessary for a duration of 24 weeks.

The candidate shall be awarded a Master of Arts (Honors) (Defence and Strategic Studies), University of Mumbai after completing the course.

- 6. Scheme of Examination and Passing. R. 9528
  - (a) Written examination of three hours duration will be conducted for each subject at the end of the course for the two theory papers, by Naval War College as per the existing norms, statutes and ordinances. Each paper will be of 100 marks each.
  - (b) To pass, a student has to obtain minimum 40% marks and above.
  - (c) Evaluation of Dissertation, will be carried out by a panel comprising of an External Examiner, Guide and a Directing Staff, coordinated by Naval War College for a total of 300 marks.
  - (d) The assessment for the theory papers shall be done by the faculty at the College of Naval Warfare. The assessment for the Dissertation paper/ presentation shall be done by the research guides and a joint faculty of the University and the Naval War College.
  - (e) Failures/ absentees in any Theory Paper will be allowed to reappear in the same.

- (f) Dissertation, if not accepted by their evaluating authority/guide, can be resubmitted with amendments as advised by the Guide. In such cases, Theory paper marks can be carried forward and candidates need not appear again in the theory papers.
- 7. Standard of Passing for University Examinations. 40 % Pass Marks. R. 9529

Standard point scale for grading.

Crodo	Percentage of Marks	Grade Points
<u>Grade</u>		10
0	90 & above	9
<b>A</b> +	80 to 89.99	9
Δ	70 to 79.99	8
	60 to 69.99	7
B+	50 to 59.99	6
B∈		5
C	45 to 49 .99	Ž
D	40 to 44 .99	4
E (E-:II)	39.99 & below	0
F (Fail)		0
AB	Absent	To the state of th

9. <u>Semester Grade Point Average (SGPA)</u>. The performance of a course participant in a semester is indicated by a number called SGPA. SGPA is the weighted average of the grade points obtained in all the subjects by the course participant during the semester. For example, if a student takes five courses in a semester with credits C1, C2, C3, C4 and C5 and the student's grade point is G1, G2, G3, G4 and G5, respectively and then students SGPA is equal to:

SPGA is calculated to two decimal points. It should be noted that, the SPGA for any semester shall take into consideration the F and ABS grade point value (G) awarded in that semester a Zero.

10. <u>Cumulative Grade Point Average (CGPA)</u>. CGPA is calculated with the SGPA of all the four semesters to the two decimal points and is indicated in final grade report card/final transcript showing the grades of all four semesters and their courses. The CGPA shall reflect the failed status in case of F grades, till the course(s) is/are passed. When the course(s) is/are passed by obtaining a pass grade on subsequent examination(s) the CGPA shall only reflect the new grade and not the fail grades earned earlier. CGPA is calculated as:



# Justification for Introduction of New Course

# Programme: Master of Arts (Honors) (Defence and Strategic Studies) (M.A. (Hon) (DSS))

	Necessity for ottaining	To give academic recognition to officers of Indian Navy, Indian Army, Indian Air Force and Coast Guard undergoing the Naval Higher Command Course at Naval War College, Goa, who possess a Master's Degree.  Prior to implementation of NEP 2020 the officers were awarded a MPhil Degree.
2.	Whether UGC has recommended to start the course?	Yes
3.	Whether the course has commenced from the Academic Year 2022-23	To Commence fron Academic Year 2022-23  The course is conducted at Naval War
4.	The course started by the University are self-financed, whether adequate number of permanent faculty are available?	College, Goa to selected serving officers from
		Sufficient SME/ Qualified Officers from the Indian Navy, Indian Army and Indian Air Force are posted at Naval War College, Goa on permanent duty.
5.	To give details regarding the duration of the course and is possible to compress the course?	One year – (25 Weeks Contact period and 25 weeks of Distance learning in the form of Research and Dissertation writing).  Officers who have already completed Nava
		Higher Command Course earlier an Directing Staff posted at the College of Nava

	W	larfare will be required to follow only the istance learning phase for Dissertation
	w T	wo Semester programme, Details as ollows:-
		The officers who attend the course will be holding a Master's Degree and therefore the Sem I and II will not be applicable to them.
0		Third semester will be contact phase at Naval War College, Goa where the officers will have to attend and clear two papers on Defence and Strategic Studies.
		Fourth semester will be research work Officers will be required to submit a Dissertation on a topic approved by Nava War College, Goa.
		The course has been designed to be conducted in minimum possible duration to employee the participants effectively in the Defence Service.
6.	Intake capacity of each course and the number of admissions given in the current AY	80 participants or as nominated by Integrated Head Quarters Ministry of Defence (Navy).
7.	Opportunity of employability / employment available after undertaking this course	design making appointmen

Name & Signature of BOS Chairperson:

Rear Admiral Sai Venkat Raman

Name & Signature of Dean:

#### 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 Walfare (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.

# **UNIVERSITY OF MUMBAI**



Syllabus for Master of Arts (Honors)

(Defence and Strategic Studies)

Semester - Sem III and IV

(Choice Based Credit System)

(Introduced from the academic year 2022-23)

Item	No	
1163111	110	

# UNIVERSITY OF MUMBAI



Ser	<u>Heading</u>	<u>Particulars</u>	
1	Title of the Programme	Master of Arts (Hon) (Defence and Strategic Studies) (M.A. (Hon.)(DSS))	
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8	Status	Revised/New (Strike out which is not applicable)	
9	To be implemented from AY	From Academic Year: 2022 -2023	

Name & Signature of BOS Chairperson:

Rear Admiral Sai Venkat Raman

Name & Signature of Dean:

Pajs dial

#### **PREAMBLE**

The Master of Arts (Honors) (Defence and Strategic Studies) (M.A. (Hon.) (DSS)) is being implemented at Naval War College, Goa.

Naval War College (NWC) was established in the year 1988 at Karanja, Mumbai, as College of Naval Warfare. The College was renamed as Naval War College (NWC) in Aug 2010 and shifted to Goa inside INS Mandovi premises in 2011. NWC, Goa commenced its professional military education activities from the present location in Sep 2011.

NWC was set up with a vision to be the pre-eminent iconic institution facilitating higher education, war gaming and cutting edge research on maritime security and warfare at strategic and operational level. The preamble of the college is to prepare officers of the Indian Navy, Army, Air Force and other organisations for Leadership at Strategic and Operational level by developing critical thinking, analytical ability, strategic vision and proficiency in Operational Art.

Naval War College conducts courses for officers from the Indian Navy, Indian Army, and Indian Air force, Coast Guard and DPSU/ Defence Shipyards including participants from friendly foreign countries and maritime experts from civil industries who are senior/middle level Leaders.

The Master of Art (Honors) (Defence and Strategic Studies), from University of Mumbai will be a one year course comprising of contact and non-contact phase. The contact Phase will comprise of Two theory subjects and the non-contact phase will be for carrying out research work towards submission of a Dissertation. The syllabus of these courses is designed to be dynamic and contemporary, that will aid conceptual understanding and synergise field work, research with data analysis.

This programme will educate, train and groom serving officers from the Indian Navy, Indian Army and Indian Air Force, Coast Guard and Defence Public Sector Undertaking (DPSU)/ Shipyards including participants from friendly foreign navies to be prepared for senior staff and command appointments and be an able advisor to the policy makers in tune with the prevailing Geo-political security environment, with emphasis on the Maritime Domain. The programme can be executed in the blended mode of teaching and learning.

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# Programme Outcomes.

- (a) Gained comprehensive knowledge of prevailing Maritime Security environment in the Indo-Pacific and Indian Ocean Region.
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# Eligibility for Admission.

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4. <u>Intake Capacity</u>: 80 officers or as nominated by Integrated Headquarters, Ministry of Defence (Navy).

## 5. Course Structure & Distribution of Credits.

<u>Semester III</u>. Semester III comprises of two theory papers with 12 credits each. Two sessions will comprise of 02 hours each. The subject details are as follows:-

SI No	Subject Code	Subject Title		Session	Credits	<u>Marks</u>
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X-1		1 4	Total	400	24	200

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- (e) Failures/ absentees in any Theory Paper will be allowed to reappear in the same.

- (f) Dissertation, if not accepted by their evaluating authority/guide, can be resubmitted with amendments as advised by the Guide. In such cases, Theory paper marks can be carried forward and candidates need not appear again in the theory papers.
- 7. Standard of Passing for University Examinations. 40 % Pass Marks.
- Standard point scale for grading.

<u>Grade</u>	Percentage of Marks	Grade Points
0	90 & above	10
A+	80 to 89.99	9
A	70 to 79.99	8
B+	60 to 69.99	7
В	50 to 59.99	6
С	45 to 49 .99	5
D	40 to 44 .99	4
F (Fail)	39.99 & below	0
AB	Absent	0

9. <u>Semester Grade Point Average (SGPA)</u>. The performance of a course participant in a semester is indicated by a number called SGPA. SGPA is the weighted average of the grade points obtained in all the subjects by the course participant during the semester. For example, if a student takes five courses in a semester with credits C1, C2, C3, C4 and C5 and the student's grade point is G1, G2, G3, G4 and G5, respectively and then students SGPA is equal to:

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where C1, C2, C3 and C4 is the total number of credits for Semester I, II, III and IV respectively and S1, S2, S3 and S4 are the SPGA obtained in Semester I, II, III and IV respectively.

11. <u>Declaration of Results</u>. Although the GPA is a stand alone system of grading and not amenable to facile conversion to percentage marks, in general, the conversion of CGPA to percentage marks is CGPA x 9.5 = Percentage Marks. The class shall be awarded on the basis of CGPA as follows:-

(a) First Class with Distinction

CGPA of 7.37 and above

(b) First Class

CGPA of 6.32 to 7.36

(c) Second Class

- CGPA of 6.00 to 6.31

12. <u>Award of Degree</u>. Candidates who fulfil the requirements mentioned above shall be eligible for award of degree during the ensuing convocation.

13. <u>Duration of Completion of the programme of study</u>. Duration for completion of the programme of study shall be fixed as per the norms of the University of Mumbai.

# Scheme of Subjects for M.A.(Hon.) in Defence and Strategic Studies

Subject Code: MAHDSS101, Subject Title: Maritime Strategy, 125 Sessions, Max Marks-100

<u>Subject Objective</u>: At the end of the course, the participant will be able to carry out maritime strategy analysis involving higher Defence Decision Making techniques and maritime logistic management.

### Syllabus:-

### <u>Strategy</u>

- 1. Land, Air, Maritime and Nuclear Strategy.
- 2. Analysis of maritime and military strategists.
- 3. Elements of National Power.
- 4. Geo-Politics and Regional Security Studies of South –Asia and IOR.
- 5. India's Foreign Policy.
- 6. Major Power relationship in Asia.
- 7. Globalisation
- 8. Economic issues
- 9. Challenges and Dilemmas facing India as it emerges in the 21st Centaury

#### Higher Defence Decision Making

- 10. National Security Council.
- 11. Higher Defence Decision Making Organisation.
- 12. Force Structuring and Defence Planning concepts.
- 13. Financial Planning.
- 14. Research and Development Programmes.
- 15. Human Resources Management.
- 16. Civil-Military relationship
- 17. Challenges of Leadership in the 21<sup>st</sup> Century.

## Logistic Management

- 18. Logistic support for Maritime Ops.
- 19. Maintenance and Infrastructure Creation.
- 20. Management of Training.
- 21. Management of Civilians

#### Recommended Books:-

- 1. National Security Policy by PS Jayaram
- Security in the New World Order by SD Sinha
- 3. Asian Security in the 21st Century by Air Cmde J Singh
- 4. Economics of Defense in the Nuclear Age by CJ Hitch, RN MCkean
- 5. Nuclear Proliferation: The US-Indian Conflict by Brahma Chellaney
- 6. India's Nuclear Weapons Programme by Shamsa Nawaz
- 7. Future of Land Based Strategic Missiles by BG Levi, M Sakitt, Art Hobson
- 8. Nuclear Proliferation & the Near Nuclear Countries by Marwah, Schlz
- 9. Nuclear India by Cmde J Singh
- 10. Nuclear Strategy by Raja Menon
- 11. Blue Print to Blue Water IN (1951-1965) by RAdm S Singh AVSM
- 12. Pearl Harbour Final Judgement by Henry C Glausen/ Bruce Lee
- 13. Indian Navy: an Illustrated History by Raja Menon
- 14. Indian Army by Dr S Radhakrishnan
- 15. War in Space by Nigel Flynn
- 16. Indian Army by Lt Gen SL Menezes
- 17. Maritime History of India by RAdm K Krishnan
- 18. Great War & the Shaping 20th Century by Jay Winter & Blaine Beggett
- 19. Indian Military Revival by Maj GD Bakshi
- 20. Trends in India's Defence Expenditure by Y Lakshami
- 21. Economic of Defence by Dr Jai Narayan
- 22. Defence & Foreign Policies of India by V Lunger
- 23. Diplomacy of Peace and War by TN Kaul
- 24. India's Foreign Policy by MG Gupta
- 25. History of the Indian Navy 1613-1863 by CR Low
- 26. Evolution of National Strategy of India by Col Ravi Nanda
- 27. India Security Problems in the Nineties by Rakesh Gupta
- 28. Maritime Security & Peacekeeping by Michael Pugh
- 29. Navies & Foreign Policy by K Booth
- 30. Studies in Defence by Eston T white
- 31. Dimensions of Military Strategy by Eston T White
- 32. Maritime Strategy and Continental Wars by Raja Menon
- 33. NATO& U.S. Maritime Strategy by Ellmann Ellingsen
- 34. Maritime Strategy and the Nuclear Age by Geoffrey Till
- 35. Maritime Strategy for Medium Powers by RAdm JR Hill
- 36. Supreme Command, Soldiers, Statesman and Leadership by Eliot Cohen
- 37. A Military History of China by David A Graff & Robin Higham
- 38. Political Influence of Naval Force in History by James Cable
- 39. Salt and Steel by Edward L Beach

- 40. Victory on the Potomac: The Gold Water by James R Locjer III
- 41. Naval Strategy in the North East Asia: Geostrategic Goals and Policies by Duk-Ki-

Kin

- 42. Text Book of Project Management by P Gopalakrishnan
- 43. Project Management by Ving Sharon Le
- 44. Practical Time Management by Bradley C.Mc Rae
- 45. Ethics Management by LaRue Tone Hosmer
- 46. Personnel/Human Resource Management by Heneman
- 47. Management Ideas in Action by Deepak Mahindra
- 48. Team Management by Charles Mrgerison
- 49. Excellence in Management by MK Rustomji
- 50. Human Resources Management by Santrupt Mishra
- 51. Financial Management by IM Pandey
- 52. Logistic Support & Material Management by CDM
- 53. Stress Management by Edward A Charlesworth, Ph.D.
- 54. Adv. Technology Warfare by Friedman Richards
- 55. International Transfer of Technology by SM Mukerjee
- 56. Advanced Technology Warfare by Col Richard S Friedman
- 57. Management of Technology by Edward P. Hawthrone
- 58. Impact of New Military Technology by Jonathan Alford
- 59. Tomorrow War-The Threat of High Technology Weapons by David Sukman
- 60. The Information Technology Act by D.N Panda
- 61. Military Technology and Defence Industralisation by SK Sen
- 62. Technology Control Regimes for a Str. Response by NHQ/DNI
- 63. Technology Strategic and National Security by F.D Marigotta
- 64. National Security and Modern Technology by Dr Raja Ramana
- 65. Science Technology & International by Pranav N Desai
- 66. Technology and Terrorism by Paul Wilkinson
- 67. Management of Technology Change by A.S Rao
- 68. With Pride & Honour: The Biography of Admiral RL Pereira Anup Thomas
- 69. Seapower: A Guide for the Twenty-First Century Geoffrey Till
- 70. Mahan Corbett & Foundation of Naval Strategic Thought Kevin McCranie
- 71. World War II at Sea: A Global History Craig Symonds
- 72. One Hundred Days: The Memoirs of the Falklands Battle Group Commander Sandy Woodward
- 73. The Royal Indian Navy: Trajectories, Transformation & Transfer of Power Kalesh Mohanan
- 74. Shedding Shibboleths By K Subrahmanyam
- 75. India's Security in a Turbulent World by Jasjit Singh
- 76. Kautilya Arthashastra by LN Rangarajan
- 77. On War by Clausewitz
- 78. Art of War by Sun Tzu

- 79. India and the Indian Ocean By KM Panikkar
- 80. From the Crow's Nest: A Compendium of Speeches and Writings on Maritime and other issues by Adm Arun Prakash (Retd)
- 81. World Order by Henry Kissinger
- 82. Diplomacy by Henry Kissinger
- 83. The Revenge of Geography: What the Map Tells Us About Coming Conflicts and the Battle Against Fate by Robert D Kaplan
- 84. The India Way by S Jai Shankar
- 85. A Splendid Exchange by William J. Bernstein
- 86. Nuclear Strategy: India's March Towards Credible Deterrence by Manpreet Sethi
- 87. No Way but Surrender by VAdm Nilakantha Krishnan
- 88. Fighting to the End: The Pakistan Army's Way of War by C Christine Fair
- 89. Idea of Pakistan by Stephen P Cohen
- 90. Operation X by MNR Samant and Sandeep Unnithan
- 91. Pakistan: Courting the Abyss by Tilak Devasher
- 92. On China by Henry Kissinger
- 93. The Hundred Year Marathon: China's Secret Strategy to Replace America as the Global Superpower by Michael Pillsbury
- 94. China's India War by Bertil Lintner
- 95. The Ultimate Goal by Vikram Sood
- 96. Techniques of Statecraft: A Study at Kautilya's Arthasastra by Aradhana Parmar
- 97. The Landmark Thucydides by Thucydides
- 98. Some principles of Maritime Strategy by Julian S Corbett
- 99. Mahan on Naval Strategy lectures by Alfred Thayer Mahan

Subject Code: MAHDSS102, Subject Title: Operational Art of Warfare, 300 Sessions, Max Marks-100

<u>Subject Objective</u>: At the end of the course, the participant will be able to carry out the Operational and Tactical tasks ass specified by higher formations involving Joint Militatry Operations involving modern technology.

### Syllabus:-

## Operational of War

- 1. Operational Art.
- 2. Joint Operations.
- 3. Maritime Operations.
- 4. Land Warfare.
- 5. Air Operations.
- 6. Concepts of Maritime Air Operations.
- 7. Intelligence and Communication capabilities.
- 8. Deployment of Coast Guard.
- 9. Indian Merchant Marine Management.
- 10. Operational Level War game at NWC

#### Joint Operations

- 11. Joint Operations Capsule.
- 12. Theatre Level Warfare.
- 13. Visits to Army and Air Force formations deployed in forward areas.

#### Technology

- 14. Concept of RMA.
- 15. Technological Capabilities in Defence.
- 16. Cyber Network System and Information Warfare.
- 17. Visits to R&D Labs and Industry.

#### Recommended Books:-

- 1. Op Art by Milan Vego
- 2. Doctrine for Joint Operations by Joint Publication
- 3. Dangerous Waters, Modern Piracy and Terror on the High Seas by John S Burnett
- 4. The Naval Battle of Guadal Canal by James W Grace

- 5. Air Power in the Age of Total War by John Buckley
- 6. Salt and Steel by Edward L Beach
- 7. Nerve Centre by Michael K Bohn
- 8. Asymmetrical Warfare, Today's Challenge to US Military Power by Roger W Barnett
- 9. Pursuit The Chase & Sinking of the Battleship Bismarck by Ludovic Kennedy
- 10. Modern War by Charles Townhand
- 11. India's Armed Forces by Maj Jodh Singh
- 12. Nuclear India by Air Cmde J Singh
- 13. Brasstacks & Beyond by KP Bajpai, PR Chari
- 14. Avoiding Nuclear War by Brassey's
- 15. Principles of Global Security by K Subramanyam
- 16. Global Defense by Geoffrey Williams
- 17. Arms Races, Arms Control by Walter Israd
- 18. Diplomacy at Sea by James Cable
- 19. Pakistan's Nuclear Dilemma by Akhtar Ali
- 20. Nuclear Proliferation & the Third world by TT Poulose
- 21. Nuclear Proliferation International Security by K Subramanyam
- 22. Nuclear Weapons by B Sen Gupta
- 23. To win a Nuclear War by D Axelord
- 24. India's Nuclear Policy by MB Alam
- 25. Strategy & Nuclear Deterrence by Steven E Miller
- 26. Limited War Revisited by Robert E Osgood
- 27. Indian Sword Strikes in East Pakistan by Maj Gen L Singh
- 28. Victory in Bangladesh by Maj Gen L Singh
- 29. Guerilla Warfare & Special Forces Operations by Marshal
- 30. Fourth round Indo-Pak War by Ravi Rikhe
- 31. Future Fire by Ann Marien Cunningham
- 32. Pakistan Army by Stephan P Cohen
- 33. Islamic Bomb by Steve Weissman
- 34. Military & Politics in Pakistan by Hasan-Askari Rizvi
- 35. Nuclear Bomb & Pak by VD Chopra
- 36. Pakistan's Security by Air Cmde Zulficar Ali Khan
- 37. Technology Trap by Timothy Garden
- 38. India's Progress in Science & Technology by Najma Heptulla
- 39. Technology Strategy & National Security by Franlik D.Margoitta
- 40. Building a Defence Technology Base by Maj Gen BD Kapur
- 41. Adv. Technology Warfare by Friedman Richards
- 42. International Transfer of Technology by S Mukerjee
- 43. Advanced Technology Warfare by Col Richard S Friedman
- 44. Management Technology Warfare by Edward P. Hawthrone
- 45. Impact of New Military Technology by Jonathan Alford

- 46. Tomorrow War The Threat of High Technology Weapons by David Shukman
- 47. The Information Technology Act by D.N.Panda
- 48. Military Technology and Defence Industrialization by SK Sen
- 49. Technology Control Regimes for a Stronger Response by NHQ/DNI
- 50. Technology Strategy & National Security by F.D Marigotta
- 51. National Security and Modern Technology by Dr Raja Ramana
- 52. Science Technology & International Cooperation by Pranav N Dessai
- 53. Technology and Terrorism by Paul Wilkinson
- 54. Management of Technology Change by A.S Rao
- 55. On Operations: Operational Art and Military Discipline B.A. Friedman
- 56. Seapower: A Guide for the 21st Century by Jeffrey Till
- 57. The Tech Whisperers by Jaspreet Bindra
- 58. Industries of the Future by Alec Ross
- 59. The Future is faster Than you Think by Peter Diamandis & Steven Kotler
- 60. Seapower and the State by Sergey Gorshkov
- 61. Joint Operational Warfare: Theory and Practice by Milan Vego

Subject Code: MAHDSS103 Subject: Dissertation, Max Marks - 300, Non-Contact Phase of 25 weeks.

- 1. The officers appearing for the M.A (Hon.) Degree will be required to undertake a detailed research on a subject of contemporary relevance. A list of topics for the research will be drawn out by the faculty of the College of Naval Warfare, in consultation with the Mumbai University and the concurrence of the College Advisory Council member. Out of this list, participants will be required to give a choice of the three subjects and faculty will allot the topic for individual research. Guides for the subject may be chosen from the Senior Naval officers or an eminent personality from the respective field.
- 2. Officers will be required to undertake a detailed research on the topic allocated during the 'Distance learning' Phase and prepare a thesis of about 12000 words. The thesis will require careful study and well-reasoned logical thinking, analytical ability, ingenuity and power of expression.
- 3. Officers having undergone NHCC and Directing Staff Borne at NWC, Goa. All officers who have attended NHCC/ Equivalent course abroad earlier and the officers borne at the college of Naval Warfare as Directing Staff, desirous of obtaining the M.A. Degree in Defence and Strategic Studies Degree, will be required to undertake research on a topic decided by Naval War College faculty and prepare Dissertation paper of about 12000 words. This Dissertation would be required to be submitted to NWC for analysis. Officers will also be required to make a presentation on the subject to a combined faculty of the University of Mumbai and the Naval War College, followed by a Viva Voce. M.A. (Hon) Degree will be awarded based on the result of the Dissertation and the Viva Voce.
- 4. **Evaluation** The total assessment for the research work/ presentation/Viva Voce would be of 300 marks with a passing percentage of 40%. The breakdown of marks for the research work will be as follows:-

(a) Thesis Paper - 150 Marks

(b) Presentation - 50 Marks

(c) Viva Voce - 100 Marks