Vidyasagar University

Curriculum for B.A (General) in National Cadet Corps (NCC) [Choice Based Credit System]

Semester-I

Course	Course Code	Name of the Subjects	Course Type/ Nature	Teaching Scheme in hour per week		Credit	Marks	
				L	T	P		
CC1 [DSC-1A]		C1T: National Security, NCC, Indian Army – Organization ,National Integration & Awareness	Core Course-1	4	0	0	6	75
		C1P: Drill (without arms) & Social activity		0	0	4		
CC2	TBD	DSC-2A	Core				6	75
[DSC-2A]		(other Discipline)	Course-2					
AECC Core[L-1]		English-1	AECC-Core [Language core]	5	1	0	6	75
AECC (Elective)		English	AECC (Elective)	1	1	0	2	50
	I	Semester Total	I				20	275

L=Lecture, T=Tutorial, P=Practical, CC = Core Course, TBD = To be decided, AECC (Elective) = Ability Enhancement Compulsory Course (Elective)

DSC-1 = Discipline Specific Core of Subject-1, **DSC -2** = Discipline Specific Core of Subject-2,

AECC- Core [L-1]: Ability Enhancement Compulsory Course - Core [Language Core - 1]

Semester-I Core Courses (CC)

CC-1: National Security, NCC, Indian Army – Organization ,National Integration & Awareness Credits 06

C1T: National Security, NCC, Indian Army – Organization ,National Integration & Credits 04

Module I: NCC organization

- 1. History of NCC, Aims and Objectives of NCC.
- 2. Organization & Training and NCC Song, Motto of NCC Motivation of Cadets.
- 3. System of NCC Trainings. Incentives and benefits.
- 4. Awards, different types, Rank of officers and cadets.
- 5. Role of NCC Cadets in National programmes.
- 6. Opportunities of NCC Cadets in army and other services.
- 7. Camps, types of camps. Preparation and participation.

Module II: National Integration and Awareness

- 1. Religions, Culture, Traditions and Customs of India.
- 2. National Integration: Importance and Necessity. Unity in diversity.
- 3. Freedom Struggle and Nationalist Movement in India.
- 4. National Interests, Objectives, Threats and Opportunities.
- 5. Problems / Challenges of National Integration.
- 6. National Integration Council.
- 7. Contribution of Youth in Nation Building.

Module III: National Security Organizations

- 1. National Defence Policy.
- 2. Organization and Administration of defence.
- 3. Role of intelligence.
- 4. National security system.

Module IV: Indian Army – Functional Organisations

- 1. Combat Branches-Infantry, Armoured.
- 2. Supporting Arms Artillery including Air Defence, Engineers, Signals, Aviation.
- 3. Logistic Organisations ASC, AOC, EME, AMC, ENGINEERS.
- 4. Other Intelligence, Education, Legal.

Module V: Drill

- 1. General and words of command.
- 2. Attention, stand at ease and stand easy, turning and inclining at the halt.

- 3. Sizing, forming up in three ranks and numbering, open and close order march and dressing.
- 4. Saluting at the halt, getting on parade, dismissing and falling out.
- 5. Marching, Length of pace and time of marching in quick time and halt, slow march and halt.
- 6. Side pace, pace forward and to the rear.
- 7. Turning on the march and wheeling.
- 8. Saluting on the march.
- 9. Marking time, forward March and halt in quick time.
- 10. Changing step.
- 11. Formation of squad and squad drill.
- 12. Guard of Honour and Ceremonial drill.

C1P: Drill (without arms) & Social activity (Practical)

Credits 02

1. Drill (Without arms):

Drill without Arms: i) Savdhan (Attention), ii) Vishram (stand on easy), iii) Aram se (stand easy), iv) Tej Chal (quick march), v) Thum (halt), vi) Dahine Mur (Right turn), vii) Baen Mur (left turn), viii) Piche Mur (About turn), ix) Samne ka Salute, x) Patra ke sath Salute, xi) Line Tour (Falling out), xii) Visarjan (Dismiss).

2. Social Activity – any one

- i) Tree plantation, ii) Blood Donation, iii) Participation in Social Awareness Programme, iv) Participation in Environment Awareness Programme, v) Participation in Health and Hygiene Awareness Programme.
- 3. **Field reports**: Students will be submitted a Field Reports on any Social Awareness Programme organized by the Institution.

4. Laboratory Note Book

Students will be required to maintain records of all works done in connection with the topics taught in this paper.

Vidyasagar University

Curriculum for B.A (General) in National Cadet Corps (NCC) [Choice Based Credit System]

Semester-II

Course	Course	Name of the Subjects	Course Type/		ing Sch		Credit	Marks
Code			Nature	in hour per week				
				L	Т	Р		
DSC-1B		DSC1BT: Personality Development, Human Health, Social & Environmental awareness and Community Development.	Core Course	4	0	0	6	75
		DSC1BP: Practical		0	0	4		
DSC-2B	TBD	DSC-2B (other Discipline)	Core Course				6	75
AECC Core[L-1]		MIL-1	AECC-Core [Language core]	5	1	0	6	75
AECC		ENVS	AECC (Elective)				4	100
Semester Total							22	325

L=Lecture, T=Tutorial, P=Practical, CC = Core Course, TBD = To be decided, AECC= Ability Enhancement Compulsory Course

DSC-1 = Discipline Specific Core of Subject-1, **DSC-2** = Discipline Specific Core of Subject-2,

DSC-3 = Discipline Specific Core of Subject-3.

Semester-II <u>Core Courses (CC)</u>

DSC-1B (CC-2): Personality Development, Human Health, Social & Environmental awareness and Community Development.

Credits 06

DSC1BT: Personality Development, Human Health, Social & Environmental awareness and Community Development.

Credits 04

Course Contents:

Module -I: Personality Development and Leadership

- 1. Personality Development introduction. Factors Influencing /shaping Personality: Physical, social, psychological and philosophical.
- 2. Self-Awareness Know yourself/ Insight. Self Defense- Theory and practice, prevention of untoward incidence. Self defense mechanisms. Change your mind set.
- 3. Interpersonal relationship and communication.
- 4. Leadership Traits. Types of Leadership and perception. Effects of Leadership with historical examples. Attitude Assertiveness and negotiation.
- 5. Time management. Stress management.
- 6. Importance of Group /Team Work.
- 7. Influencing Skills. Sociability: Social Skills. Values / Code of Ethics.

Module-II: Health and Hygiene

- 1. Structure & functioning of the human body. Hygiene & sanitation (Personal & Food hygiene). Physical & Mental Health. Infectious & Contagious Diseases & its prevention. Preventable diseases, fractures and types of treatments.
- 2. Basics of home nursing. First aids: methods and Practice. First aids in common medical emergencies. Snake bites. Wounds & Fractures. Dressing of wounds.
- 3. Yoga &Exercises introduction. Role on physical and mental health.

Module-III: Environmental Awareness and Conservation

- 1. Natural Resources Conservation & Management. Water Conservation & Rainwater harvesting. Waste Management.
- 2. Environment and ecology pollution and its control; Water, Air, Noise and Soil. Wild life conservation. Energy Conservation.

Module-IV: Social Awareness and Community Development

1. Basics of Social Service, weaker sections of our society and their needs. Social / Rural Development Projects: MNREGA, SGSY, NSAP etc. NGOs: Role & Contribution. Social service – family planning.

- 2. Drug Abuse & Trafficking. Causes & Prevention of HIV/AIDS; Role of youth
- 3. Social Evils Dowry/Female Foeticide / Child abuse & trafficking, etc. Provisions of Protection of Children from Sexual Harassment Act 2012.
- 4. Traffic Control Organization and Anti-drunken driving. Traffic rule and road signs.
- 5. Counter Terrorism. Corruption
- 6. Contribution of youth towards social welfare. Civic Responsibilities.
- 7. NCC cadets and civil administration.

DSC1BP: Practical Credits 02

1. Drill:

Drill without Arms: i) Sizing, forming up in three ranks, numbering, open and close order march and dressing, ii) Getting on parade, dismissing and fall out, iii) Saluting at the halt, iv) Marching, length of space and time of marching, marching in quick tome and halt, v) Turning at the march and wheeling, vi) Saluting at the march, vii) Side space, pace forward and to the rear, viii) Marking time, forward and halt in quick time and changing step, ix) Formation of squad and squad drill.

2. First Aids

- i. Principles of First aids.
- ii. First aids for Snake bite, Burns and Scalds, Drowning, Poisoning, Dog bite.

3. Tactical exercise without troops

- a. Sand model on the following: a) attack, b) defense
- b. Outline organization of infantry Battalion in Lab Note Book
- c. Chart showing Organization, weapons at equipments at platoon level
- d. Verbal order at platoon level
- e. Movement without arms and section battle drill
- f. Message writing

4. Field reports

Students will be submitted a Field Reports on any Health & Hygiene, / Environment Awareness Program organized by the Institution.

5. News paper clippings

News paper clippings on relevant defense related topics and a short essay on the basis of clippings to be produced.

6. **Field visit:** Field visit to defense establishment/ places of military interests. Students will submit a field report.

7. Laboratory Note Book

Students will be required to maintain records of all works done in connection with the topics taught in this paper.

Vidyasagar University

Curriculum for B.A. (General) in National Cadet Corps (NCC)

[Choice Based Credit System]

Semester-III

Course	Course	Name of the Subjects	Course Type/	Teaching Scheme		eme	Credit	t Marks
	Code		Nature	in hour per week				
				L	Т	Р		
DSC-1C		DSC1CT: Defense Organization, Military Geography, Military History, Field Craft & Battle Craft and Weapon Training	Core Course	4	0	0	6	75
		- Practical		0	0	4		
DSC-2C	TBD	DSC-2C (other Discipline)	Core Course				6	75
AECC Core[L-2]		English -2	AECC-Core [Language core]	5	1	0	6	75
SEC-1		SEC1T: Volunteering Or Human Rights Education and Humanitarian LawOr News Writing Procedure and News Story	Skill Enhancement Course-1	1	1	0	2	50
Semester Total							20	275

 $\mathbf{L}=$ Lecture, $\mathbf{T}=$ Tutorial, $\mathbf{P}=$ Practical, $\mathbf{CC}=$ Core Course, $\mathbf{TBD}=$ To be decided, $\mathbf{SEC}=$ Skill Enhancement Course.

DSC-1 = Discipline Specific Core of Subject-1, **DSC-2** = Discipline Specific Core of Subject-2,

AECC- Core [L-2]: Ability Enhancement Compulsory Course-Core [Language Core]

Semester-III

Core Course (CC)

DSC-1C (CC-3): Defense Organization, Military Geography, Military History, Field Craft & Battle Craft and Weapon Training

Credits 06

DSC1CT: Defense Organization, Military Geography, Military History, Field Craft & Battle Craft and Weapon Training Credits 04

Course Contents:

Module-I: Defense Organization of India

- a) **Principles of Defense Organization**. Principles of defense organization and administration. **Reconstruction of Indian Armed Forces -** a) Indian armed forces under the British Rule, b) Reconstruction of Army after 1947, b) Reconstruction of Navy, c) Reconstruction of Air Force-Hierchy of Higher Defense Organization of India of Present time. Hierarchy of Higher Defense Organization.
- b) Indian Armed Forces: Basic organisation of Armed Forces. Strength, task & role of Indian armed forces. Organizational structure of Indian Army: Different Commands of Indian army. Static formation of army, field formation of army. Composition of Indian army: a) Organizational structure of an infantry battalion, b) Organizational structure of an Armoured regiment, c) Organizational structure of artillery Field Regiment.
- c) Indian Navy: History, structure, organization, characteristics, command, support services, its role during war.
- **d) Indian Air Force:** History, structure, organization, characteristics and Different commands of Indian Air Force: Limitation of Air Force role during war.

Module -II:

A. Organization of Supported Arms:

- a) **Paramilitary Forces:** Assam Rifles, Central Armed Police Forces, Special Frontier Forces. Central Reserve Police Forces (CRPF), Boarder Security Forces (BSF), Indo-Tibetan Boarder Police (ITBP), Shasastra Seema Bal (SSB),
- b) **Special Forces:** Special Frontier Forces, Central Industry Security Force (CISF).
- c) **Para Special Force [Para (SF)]:** Ghatak Force, Marine Commando (MARCOS), Guard Commando Force.
- d) **Other Protection Forces:** National Security Guards (NSG), Special Protection Group (SPG), Railway Protection Forces (RPF).
- e) **Second Line of Defense :** Indian Coast Guard, National Cadet Corps (NCC). Territorial Army

B. Military decoration of Indian army:

Badges of Ranks- Honours and Awards - Gallantry award - Doctrine, Corps and field forces - Concept of Integrated Defence staff- Modes of entry to army - Structural changes in Indian Defense Organization

Module -III: Military Geography

- a) Introduction: Meaning, nature, scope and elements of Military Geography. Man and Environment. Role of geography in military application. Military geography in India and defense problem in relation thereto-role of geography in different warfare.
- **b)** Evolution of Military Geography: a) History & Development. b) Founders of Military Geography F. Ratzal, A.T. Mahan, c) Sir. Halfred Mackinder, Karl Haushofer, N.J. Spykman
- c) Inter-State relations & Geographical factors: a) Frontiers and Boundaries of India its meaning & differences types of borders and boundaries. b) Communication routes- land, sea and aerial- strategic scope. c) Population and Power
- **d)** Geography and Foreign Policy of India: a) India's Geo-strategic significance, b) India's borders, c) Indian Ocean territory and strategic significance.
- **e) Applied Military Geography:** Brief idea on a) Global Positioning System (GPS), b) Global Information System (GIS) and c) Remote Sensing.

Module -III: Map Reading

Theoretical aspects of Map Reading:

Introduction to different types of Maps, and Conventional Signs. Scales & Grid System. Topographical Relief features, Contours and Gradients - Cardinal points and Types of North - Types of bearings and use of Service Protractor - Prismatic compass and its use. Setting a Map - finding North and own position - Map to Ground, Ground to Map - Point to Point March – use of GPS.

Module -IV: Military History

- **a.** Definition, Concept, Significance to study Military history. Military system of India since Vedic era to modern India.. A brief survey of the military tradition of India. Weapon, Battle dress. Kautilya's philosophy of war organization and art of war, weapons and interstate relation. War pattern and tactics in different periods in India a comparative study. Historiography of military history of India.
- **b.** Biographies of renowned Generals:

- i. Niccolo Machiavelli (1469-1527), Giulio Douhet (1869 1930), Jorge Smith Patton (1885-1945), Bernard Law Montogomery (1887-1976), J. E. Rommel (1891-1944)
- ii. Kodandera Madappa Cariappa (1899-1993), S.H.F.J. Manekshaw (1914-2008), Subrata Mukherjee (1911-1960), Sundarilal Matharadas Nanda (1915-2009).
- **c.** Indian Army War Heroes PVCs.
- **d.** Study of the following important battles of India with its background, causes, results and its review: Battle of Panipath (1526AD), Battle of Plessey (1757AD), Battle of Chillianwalla (1849AD), Kashmir Conflict (1947), Operation of Mizo National Front (1966), Indo Pak war 1965, 1971, Operation Cactus (1988), Sri-Lanka Mission (1987-1990) & Kargil war (1999).

Module - V: Field Craft, Battle Craft

Introduction. Judging Distance and its methods. Description of ground. Recognition, description and indication of landmarks & targets. Observation, Camouflage and Concealment. Field Signals. Section Formations . Section Battle Drill. Fire fighting. Fire Control Orders. Fire and Movement. Knots and Lashings. Section Battle Drill.

Module -VI: Weapon Training

Theoretical aspects of Weapon Training:

- **1.** Object of Weapon training . Types of weapons, parts, stripping and assembling of light guns. Characteristics of a rifle rifle ammunition and its firepower. Rifle Mark III.
- **2.** Stripping, assembling, care and cleaning and sight setting of .22 rifle.
- **3.** Stripping, assembling, care and cleaning of 7.62mm SLR and its loading cocking and unloading.
- **4**. Rules of Aiming. Firing position. The lying position, Holding& aiming.
- **5.** Trigger control and firing a shot.
- **7.** Range procedure and safety precautions.
- **8.** Theory of Group and Snap shooting.
- **9.** Short range firing, Aiming Alteration of sight.
- **10.** Rifle firing and follow up practice.
- 11. Parts of heavy weapons, stripping and assembling of heavy weapons.
- 12. Essentials of Good Shooting

DSC1CP: Drill, Military History & Map Reading (Practical)

Credits 02

Practical:

1. Drill with Arms:

- a. Getting on parade with rifle and dressing at the order.
- b. Dismissing and falling out.

- c. Ground / take up arms
- d. General salute, salami shastra
- e. Squad drill
- f. Short / long tail from the order and vice-versa
- g. Examine arms

2. Military History:

- a. Prepare sand models of Battle formation of the following Battles:
- i) Battle of Plessey, 1757,
- ii) Battle of Chilianwala, 1849,
- iii) Three battles of Panipath,
- iv) Indo-Pak war of 1947, 1962, 1971,
- v) Kargil war, 1999.
- **b.** Draw sketches on plan papers of the following Battles:
- i) Battle of Plessey, 1757,
- ii) Battle of Chilianwala, 1849,
- iii) Three battles of Panipath,
- iv) Indo-Pak war of 1947, 1962, 1971,
- v) Kargil war, 1999.

3. Map Reading:

- 1. Map civil and military
- 2. Concept of military maps and map index
- 3. Topographical sheet
- 4. Scales and grid system
- 5. Conventional sign civil and military
- 6. Compass: liquid prismatic compass uses of compass during day and night
- 7. Location and identification of objects from ground to map and vice-versa
- 8. Preparation of night march chart
- 9. Preparation of weather chart
- 10. Field sketching, eye and memory sketching
- 11. Determination of visibility of survey maps of hilly region by comparing gradients and section drawing methods.

4. Field reports:

Students will submit a field report based on participation in a NCC camps.

5. Field visit: Field visit to military establishment for the demonstration of different weapons, armaments and weapon carriers. Students will submit a field report.

6. Laboratory note book

Students will be required to maintain records of all works done in connection with the topic taught in this paper.

Skill Enhancement Course (SEC)

SEC-1: Volunteering Credits 02

SEC1T: Volunteering

Course Contents:

- a) Meaning of volunteering, need for volunteering, types of volunteering, benefits of volunteering.
- b) United Nations volunteers: An introduction; Youth Empowerment and volunteerism; Role of youth in peace building, development and socio-economic change; Group presentations.
- c) Traits of an effective volunteers; Self awareness, Essential skills of a volunteer: Importance of effective communication, skills in Conflict Resolution, Team Building, Leadership.

Or

SEC-1: Human Rights Education and Humanitarian Law

Credits 02

SEC1T: Human Rights Education and Humanitarian Law

Course Contents:

- a) Meaning of Human Rights, Importance of Human Rights: Social, Economic and Political Universal Declaration of Human Rights.
- b) Human Rights and Duties in India: fundamental Rights, Directive Principles of State Policy and Fundamental Duties.
- c) Importance of Internalizing Human Rights Value Urgent need for not only sensitizing others of Human Rights and duties, but of practicing oneself those values: Self inculcation, endeavor to live up to those ideals; Duty to respect others' rights, respect each other's human dignity.

- d) United Nations and Human Rights. Human Rights and International Politics. Violation of Human Rights.
- e) India and Human Rights: Indian Constitution and Human Rights Enforcement and Policy Implementation Human Rights Protection/Violations as Chosen by Faculty Special Laws for Protection of Specific Categories / Vulnerable Sections of the people Problems of Enforcement of Human Rights in India.

Or

SEC-1: News Writing Procedure and News Story

Credits 02

SEC1T: News Writing Procedure and News Story

Course Contents:

Unit-I: Introduction to News Writing Procedure a) Where to begin, the Date and Place b) Paragraphing and Readability c) Aids to clarity and Journalistic Style

Unit-II: Defining the News Story a) The Journalist as an Interpreter b) The inverted Pyramid News vs Sequential Style c) The Usage of the third person, Grammar Quotation and Ending the story

Unit-III: The Five 'W's a) Emphasizing important points b) The Importance of time c) Telling a story 'Where' and other application of the 'W' s

Unit-IV: Types of News story a) Political b) Industrial and Finance c) Civic Affairs

Unit-V: Specialized reporting a) Science reporting b) Industrial reporting c) Entertainment Reporting- Defence Journalism & Defence Reporting- Basic idea.

Vidyasagar University

Curriculum for B.Sc (General) in National Cadet Corps (NCC)

[Choice Based Credit System]

Semester-IV

Course	Course Code	Name of the Subjects	Course Type/ Nature	Teaching Scheme in hour per week		Credit	Marks	
				L	Т	Р		
DSC-1D		DSC1DT: Military Sociology, Military Psychology, Communication Process, Field Engineering Weapon & Armaments and Adventure Training	Core Course	4	0	0	6	75
		Practical	1	0	0	4		
DSC-2D	TBD	DSC-2D (other Discipline)	Core Course				6	75
DSC-3D	TBD	DSC-3D (other Discipline)	Core Course				6	75
SEC-2		SEC2: Revolutionary war and low Intensity Operations Or Cyber Security & Crime Or Road Safety & Road Rights	Skill Enhancement Course-2	1	1	0	2	50
	Semester Total						20	275

L = Lecture, T = Tutorial, P = Practical, CC = Core Course, TBD = To be decided, SEC = Skill Enhancement Course.

DSC-1 = Discipline Specific Core of Subject-1, **DSC-2** = Discipline Specific Core of Subject-2,

DSC-3 = Discipline Specific Core of Subject-3.

List of the Core Courses (CC) and Electives

Core Courses (CC)

DSC-1D: Military Sociology, Military Psychology, Communication Process, Field Engineering Weapon & Armaments and Adventure Trainings

Skill Enhancement Course (SEC)

SEC-2A: Revolutionary war and low Intensity Operations

Or

SEC-2B: Cyber Security & Crime

Or

SEC-2C: Road Safety & Road Rights

Semester-IV

Core Course (CC)

DSC-1D (CC-4): Military Sociology, Military Psychology, Communication Process, Field Engineering, Weapon & Armaments and Adventure Trainings

Credits 06

DSC1DT: Military Sociology, Military Psychology, Communication Process, Field Engineering, Weapon and Armaments and Adventure Trainings

Credits 04

Course Contents:

Module - I: Military Sociology: a) Study of Society, Social groups, social interaction: motivation, morality, Personality – Definition and determinants. Social aspects of war. Social effects of war. Post war social problems. Social background of military personnel of India. b) Armed Force and Society: Role of Indian Armed force society and inter-dependence, military aid to civil authorizes. Civil – Military relation in India. c) Indian Armed Forces and Disaster Management: Disaster – aims and objectives, Disaster management – meaning, concept, elements and preventive measures. War and disaster. d) Overseas bases and relations – peace keeping – anti piracy and exploration mission. e) Military Coups: causes and its consequences on society. f) Problem of ex-service men of India. Benefits of service for *Jawans* and Officers. One man one person demands. Role of women in Armed forces: contemporary trends.

Module - II: Military Psychology: Military Psychology - Meaning, definition, historical development, role, aim and importance. Relevance of Psychology in the defense problems. Use of the psychology in the war and military use of Psychology. Application of the principles of psychology in the Military training. Personal adjustment factors in adjustment during army life, the recruits of adjustment to combat. Problem of adjustment and the problem of Re-adjustment of ex-soldiers.

Module - III: Communication process: Communication- main elements, types and methods of communications, media. Communication systems- internet, Faxi mail, Satellites. Characteristics of Wireless Technology (Mobile, Wi Fi, etc). Characteristics of Walkie /Talkie. Basic Radio Telephony (RT) Procedure. Military Language. Latest trends and development (Multi Media, Video Conferencing, IT). Information system and type of information. Signals- introduction to radio, telephony procedure. Field signals. Air raid warnings.

Module - IV: Field Engineering: Principles and applications, camouflage and concealment. Section formation. Mines and types of mines fields, anti tanks and explosive.

Module - V: Adventure Training: Introduction to adventure Training, Planning Organization & Conduct. Cycle & Trekking Expeditions. Organization & Conduct of Sightseeing. Spirit of Mountaineering. Selection of camp site Layout & Sanitation in camp.

Module -VI: Weapon and Armaments

- a. Evolution of arms and armaments in art of war.
- b. **Modern weapons** Small Arms Theories of small arms. History, characteristics, design, variant, operating mechanism and military significance of following common arms used in Indian Army: Glock, Mouser, IM1 Galil snaiper. .22 Rifle, .303 Rifle, 7.62 Self Loading Rifle . INSAS, LMG, 5.56 mm Rifle. Light Machine Gun (LMG).Multi caliber Individual Weapon System (MCIWS). Modern Submachine Carbine (MSMC), Artillery: Artillery Gun, No 35 HE Grenade, 2 inch Mortar. 40mm L-60 and L-70 BOFFORS GUN. DRDO 155 mm artillery gun, Dhanush Howitzer Indian Fields Gun. Shell and Ammunition: Explosive, Rockets and Mortar-Properties & Types. Missiles: Concept, characteristics, types. Anti Tank: Brief idea. Nuclear explosive: History, uses, effects, science for formation of nuclear bomb.

Weapon Carriers: Characteristics, mechanisms of operation, fire power and military importance of following: Land war weapon carrier, Naval war weapon carrier, Air war weapon carrier, Strategic transport aircraft, Tactile transport aircraft. Military Glider, Military Helicopter Fighter airplane, Bomber, Fighter- Bomber Airplane.

Weapons of Mass Destruction - Chemical & Biological Weapons: concept, characteristics and , uses. Nuclear weapons: Nuclear Command Authority in India. Strategic forces command, Indian land based nuclear armed ballistic missile, : Indian Sea based nuclear armed ballistic missiles, Nuclear armed cruise missiles. Air Defense: Brief idea.

DSC1DP: Practical Credits 02

Practical

a) Adventure training:

Parasailing, Sailing, Slithering, Rock climbing, Cycling and trekking.

b) Weapon Training

Stripping as aiming & Sight setting of Riffle. Lying position 'and hold', including bolt manipulation. Trigger control and firing a shot. Aiming, Range figures targets—Range procedure and safety precautions. Alteration of Sight and firing shots. Firing in different wind conditions. Range classification firing.

On Guard hip firing. The point 2 point. Training stick (Self defense & attack).

LMG - Stripping, assembling, piston group and barrel. LMG - Loading, unloading, Sight, aiming and holding.

c) Weapon Training - Field craft, Battle craft, Patrolling and Field engineering:

- 1. Judging distance and indication of targets.
- 2. Camouflage & Concealment
- 3. Fire discipline & Fire control order.
- 4. Observation and Concealment exercise.
- 5. Simple Verbal orders.
- 6. Field Signals
- 7. Section battle drill.

d) Weapons and Armaments:

- 1. Demonstrate following arms: .22 Riffles, .303 Riffles, Self Loading Rifles, INSAS LMG 5.56 mm, LMG, Sten Machine Carbine. Pistol & Revolvers. No 36 HE Grenade, Artillery Gun, Air Defense Gun.
 - Students will require drawing and explaining the important stages of mechanisms of the above weapons.
- Students will be required to draw sectional diagrams showing the parts connected with the mechanisms of movements and firing of the following armaments: Tanks, Air craft - Fighters, Bombers, Transport, Helicopters. Naval Ships - Frigates, Destroyers, Submarine and Torpedo.
- e) **Project:** Project report will be based on Field visit to military establishment/ places of military interests.

f) Laboratory Note Book and Viva Voce:

Students will be required to maintain records of all works done in connection with the topic taught in this paper.

Skill Enhancement Course (SEC)

SEC-2A: Revolutionary war and low Intensity Operations

Credits 02

SEC2AT: Revolutionary war and low Intensity Operations

Course Contents:

A. Guerilla War / Asymmetric Warfare: **1.** Meaning and concept, **2.** Principal and characteristic **3.** Guerilla strategy and Tactics, **4.** Contributors to the Guerilla war

B. Insurgency ad counters Insurgency: **1.** Meaning and concept, **2.** Basic Characteristics, **3.** Causes, **4.** Counter Measures.

Or

SEC-2B: Cyber Security & Crime

Credits 02

SEC2BT: Cyber Security & Crime

Course Contents:

Unit I: Introduction to Cyber Technologies. Information Systems - Networks/LAN/WAN - Military Sensors

Unit II: Types of Cyber Crime. Hacking - Password Cracking - Insecure Network ConnectionTheft at Tele Communication Services

Unit III: Impact of Cyber Crime on National Security. Impact on Armed Forces & Law enforcement Agencies' Information Systems - Impact on National Economy/Market - Impact on Citizen Security

Unit IV: Detection and Prevention methodologies. Risk Identification - Levels of Protection - Cyber Defensive Measures

Unity V: Cyber Laws. Overview of General Laws and Procedures in India - Introduction to Indian Cyber Law - Cyber Crime and Digital Evidence- Indian Perspective.

Or

SEC-2C: Road safety & Road Rights

Credits 02

SEC2CT: Road safety & Road Rights

Course Contents:

- **1.** Conceptual framework i) Introduction, ii) Meaning, iii) Concept, iv) Need
- 2. i) Road Safety & National Security, ii) Importance of Study of Road Safety.
- **3.** Road Infrastructure & Road Safety i) Quality of Road, ii) Use of Techniques & Material for Road building.
- 4. Inspection System
- **5.** Road network and its Impact -i) Types of Roads, ii) Road signs.
- 6. License System of Vehicles and Motor Vehicles Act and Rules, WB Safe Drive –Save Life

Vidyasagar University

Curriculum for B.A. (General) in National Cadet Corps (NCC) [Choice Based Credit System]

Semester-V

Course	Course Code	Name of the Subjects	Course Type/ Nature	Teaching Scheme in hour per week			Credit	Marks
	Code		Nature	L	T	P		
DSE-1A		DSE1AT: India's Defence Mechanism or Non Traditional Security Threats	Core Course	4	0	0	6	75
		DSE1AP: Practical		0	0	4		
DSE-2A	TBD	Other Discipline (Any one from Discipline 2)/TBD	Core Course	5	1	0	6	75
GE-1		TDB	Generic	4	0	0	6	75
			Elective	0	0	4		
SEC-3		SEC3T: Armed Forces (Specialized Subject) or Indian Navy (Specialized Subject)	Skill Enhancement Course	1	1	0	2	50
		Semester Total	1				20	275

L=Lecture, T=Tutorial, P=Practical, DSE= Discipline Specific Electives, GE= Generic Elective, SEC= Skill Enhancement Course, TBD = To be decided.

Semester-V

Discipline specific Elective (DSE)

DSE-1A: India's Defence Mechanism

 \mathbf{Or}

DSE-1A: Non Traditional Security Threats

Skill Enhancement Course (SEC)

SEC-3: Armed Forces (Specialized Subject)

Or

SEC-3: Indian Navy (Specialized Subject)

Generic Elective(GE)

GE-1: Introduction to the History of National Cadet Corps (NCC)

Or

GE-1:Conflict Resolution and Peace Building

Semester-V

Discipline Specific Elective (DSE)

DSE-1A: India's Defence Mechanism

Credits 06

DSE1AT: India's Defence Mechanism

Credits 04

Course contents:

Unit I: India's Defence Forces

- a) Rank Structure of three Services
- b) Recruitment Methods of three Services
- c) Important Training Institutions of three Services
- d) Second Line of Defence(Introduction to Paramilitary Forces, in brief)

Unit II:Defence Organizations in India

- a) Power of President of India in relation to Defence
- b) Role and Functions of Ministry of Defence, Government of India
- c) Composition and Function of Defence Committee/National Security Council(NSC)
- d) Chief of Staff (COS) and Joint Service Organization

Unit III: Army Organization

- a) Organization of Army Headquarter(Role of Chief of Army Staff(COAS) and Principal Staff Officers(PSOs)
- b) Static and Field Formation of Indian Army
- c) Arms and Services

Unit IV:Air Force Organization

- a) Organization of Air Force Headquarter;
- b) Role of Chief of Army Staff(COAS) and Principal Staff Officer(PSOs)
- c) Static and Field Formation of Indian Air force

Unit V:Navy Organization

- a) Organization of Air Force Headquarter
- b) Role of Chief of Army Staff(COAS) and Principal Staff Officer(PSOs)
- c) Static and Field Formation of Indian Navy

DSE1AP: Practical Credits 02

Course contents:

- 1. Paper Clippings on Security related Issues and a Case Study Report thereon.
- 2. Field Visit: Field Visit to a Place/Unit having importance on National Security and/or Strategic Defence.
- 3. Laboratory Note Book: Sand Model on Human Security/ Illegal Migration/Organised Crime.

Suggested Readings:

- N Government of India (1924): The Army of India and its Evolution, Calcutta
- Ministry of Defence, Government of India, Indian Arm Forces, Year Book(Annual)
- N Palit, D. K. (1989):Essentials of Military Knowledge, New Delhi
- Ñ Singh Nagendra (1967): Defence Mechanism of Modern State, New Delhi
- New Venkateswaran A. L. (1967): Defence Organizationin India, New Delhi

Or

DSE-1A: Non Traditional Security Threats

Credits 06

DSE1AT: Non Traditional Security Threats

Credits 04

- Unit I: Human Security; Definition, Meaning, Concept, Threats & Challenges in the Indian Context
- Unit II: Environment Security: Definition, Meaning, Concept and Contemporary Issues in the Indian Context
- Unit III: Illegal Migration: Definition, Meaning, Concept and Contemporary Issues in the Indian Context
- Unit IV: Organised Crimes: Definition, Meaning, Concept, Recent Trend in the Indian Context

DSE1AP: Practical Credits 02

Course contents:

1. Paper Clippings on Security related Issues and a Case Study Report thereon.

- 2. Field Visit: Field Visit to a Place/Unit having importance on National Security and/or Strategic Defence.
- 3. Laboratory Note Book: Sand Model on Human Security/ Illegal Migration/Organised Crime.

Suggested Readings:

- N Joakim Palme, Kristof Tamas (2006): Globalizing Migration Regime: New Challenges to Transnational Cooperation
- Noufida Goucha, John Crowley (2008): Rethinking Human Security
- Ñ Shahrbanou Tadjbakhsh, Anuradha M. Chenoy (2007): Human Security: Concepts and Implications, Rutledge Advances and International Relations and Global Politics
- N Richard A Matthew and John Barnett Bryan Macdonald and Karen L. O'Brien (2010): Global Environmental Change and Human Security
- N Kimberley L. Thachuk (2007): Transitional Threats; Smuggling and Trafficking in Arms, Drugs and Human Life
- N Lal Marie (2008): The Geopolitics of Energy in South Asia, Institute of Southeast Asian Studies, Singapore
- N Leena (2000): Energy Infrastructure; Priorities, Constraints and Strategies for India, Oxford

Skill Enhancement Course (SEC)

SEC-3:Armed Forces (Specialized Subject)

Credits 02

SEC3T:Armed Forces

Course contents:

Unit I: Organizations

- a) Basic Organizations of Armed Forces
- b) Organization of Army
- c) Badges and Ranks

Unit II:Infantry Weapon and Equipment

- a) Characteristics of Rifle and 7.62 mm SLR,
- b) Ammunition, Fire Power, Stripping, Assembling and Cleaning

Unit III: Military History

- a) Biographies of Renowned Generals
- b) Indian Army War Heroes-PVCs

Unit IV: Communications

- a) Types of Communications
- b) Characteristics of Wireless Technology (Mobile, WiFietc)

Or

SEC-3: Indian Navy (Specialized Subject)

Credits 02

SEC3T:Indian Navy

Course contents:

Unit I: Orientation and Service Subjects

- a) History of Indian Navy- In Pre and Post Independent India, Gallantry Award Winners
- b) Organization of Navy Head Quarter- Commands, Fleets, Ships and Shore Establishment
- c) Types of Warships and their Role
- d) Ranks of Officers and Sailors, Equivalent Ranks in other Services

Unit II: Ship and Boat Modelling

a) Principle of Ship Modelling

b) Maintenance of Care of Tools

Unit III: Search and Rescue

SAR Organization in the Indian Ocean

Unit IV:Swimming

Floating for Three Minutes and Free Style Swimming

Suggested Readings: Newspapers; Journals; Magazines

Generic Elective(GE)

GE-1:Introduction to the History of National Cadet Corps (NCC) Credits 06

GE1T:Introduction to the History of National Cadet Corps (NCC)

Credits 04

Course contents:

- **Unit I: History of National Cadet Corps:** National Cadet Corps of Independent India, The National Cadet Corps Act 1948, Motto of NCC, Aims and Objectives, Emblem, National Flag, NCC Song, Organisation of NCC- Army, Navy, Air Force, Training Organization
- Unit II: Youth Organization: Introduction, Importance, Association of our Great Leaders with Youth Organization- Mahatma Gandhi, Jawaharlal Nehru, Netaji Subhas Chandra Bose, Sardar Ballabh Bhai Patel
- Unit III: Nationalist Movement in India: Formation of Indian National Congress, Jalianwalabagh Massacre, Non-Cooperation Movement, Simon Commission, Civil Disobedience Movement, Quit India Movement, Emergence of Independence Day and Republic Day
- Unit IV: Military History: Great Military Leaders: Maharana Pratap, Chhatrapati Shivaji, Tipu Sultan, Rani Lakhsmi Bai, Famous Battle/War: Sepoy Mutiny, World War I and II, Ind-Pak War, 1948, 1965, 1971, and 1999, Sin-Indian War 1962
- **Unit V: Introduction to Defence Services**: Army, Navy and Air Force; Organization Structure of NCC Organizations (COY, Battalion, Group, Directorate); NCC as a path to Career Building.

GE1P: Practical Credits 02

Course contents:

1. Paper Clippings and Photographs of different NCC activities and Training Programme son Security related Issues and a Case Study Report thereon.

- 2. Field Visit: Report on Field Visit to a Place/Unit having importance on NCC activities and Training.
- 3. VIVA VOCE

Suggested Books/ Readings

- NCC Cadet Hand Book
- N V. Longer: Youth In Step
- NCC Common Subject
- Ñ Lt G. D. Singh, Pvsm, Vsm: Field Marshal S. Manekshaw (Soldiering With Dignity)

Or

GE-1: Conflict Resolution and Peace Building

Credits 06

GE1T: Conflict Resolution and Peace Building

Credits 06

Course contents:

UNIT I: Conflict Resolution and Peace Building: Concept and Significance

UNIT II; Nature of Conflict: Inter-State and Intra-State

UNIT III: Method of Conflict Resolution

- a) Pacific Methods
- b) Coercive Methods

UNIT IV: Peace Building: Legal, Regional and International Perspective

UNIT V: Confidence Building Measures; Concept and Techniques; Conflict Resolution and Peace Building: Role of IGOs, Role of NGOs and Role of UN

GE1P: Practical Credits 02

Course contents:

- 1. Paper Clippings with issues relating to Conflict resolution and Peace Building
- 2. Short Presentation/ Lecture
- 3. VIVA VOCE

Suggested Books/ Readings

- 1. Barash, D. P (2014): Approaches to Peace: A Reader in Peace Studies, Oxford University Press
- 2. Garnett, J (1970): Theories of Peace and Security, Palgrave Macmillan, London
- 3. Gultung, J (1996): Peace by Peaceful Means: Peace and Conflict Development and Civilizzation, Sage Pub
- 4. Kadloor, S (2015): Conflict Resolution and Peace Building
- 5. Murty, K. S (1986): quest for Peace, Ajanta Pub, New Delhi
- 6. Ursula, O (ed.) (2000): Peace Studies from Global Perspective, Maadhyam Books, New Delhi Veena, Kukreja: Contemporary Pakistan, Political Processes, Conflict and Cases

Vidyasagar University

Curriculum for B.A. (General) in National Cadet Corps (NCC) [Choice Based Credit System]

Semester-VI

Course	Course Code	Name of the Subjects	Course Type/ Nature	Teaching Scheme in hour per week			Credit	Marks
	Code		Nature	L	T	P	-	
DSE-1B		DSE1BT: International Terrorism or Role of NCC in Nation Building DSE1BP: Practical	Core Course	4	-0-4 / 5-1	-0	6	75
DSE-2B	TBD	Other Discipline (Any one from Discipline 2)/	Core Course	5	1	0	6	75
GE-2		GE2T: International Relations or India and Her Neighbouring Countries	Generic Elective	4	0	0	6	75
		GE2P: Practical		0	0	4	1	
SEC-4		SEC4T: Indian Air Force (Specialized Subject) or Current Affairs and General Studies	Skill Enhancement Course	1	1	0	2	50
	Semester Total						20	275

L=Lecture, T=Tutorial, P=Practical, DSE= Discipline Specific Electives, GE= Generic Elective, SEC= Skill Enhancement Course, TBD = To be decided.

Semester-VI

Discipline specific Elective (DSE)

DSE-1B: International Terrorism

Or

DSE-1B: Role of NCC in Nation Building

Skill Enhancement Course (SEC)

SEC-4: Indian Air Force (Specialized Subject)

Or

SEC-4: Current Affairs and General Studies

Generic Elective (GE)

GE-2: International Relations

Or

GE-2: India and Her Neighbouring Countries

Discipline Specific Elective (DSE)

DSE-1B: International Terrorism

Credits 06

DSE1BT: International Terrorism

Credits 04

Course contents:

Unit I: Terrorism, Meaning, Concept, Philosophy and Historical Perspective

Unit II: Causes of Terrorism: Social, Economic, Political and Religious

Unit III: International Terrorism, State Terrorism and State-sponsored Terrorism Context

Unit IV: Terrorism and National Security, Strategy for fighting against Terrorism

DSE1BP: Practical Credits 02

Course contents:

1. Paper Clippings on Security related Issues and a Case Study Report thereon

- 2. Field Visit: Field Visit to a Place/Unit having importance on National Security and Strategic Defence
- 3. Laboratory Note Book; Viva-Voce
- 4. Educational Tours and its Reports

Suggested Readings:

- Brass, Paul R., (1991): Ethnicity and Nationalism, New Delhi, Sage Publications.
- Combs, Cindy C., (1997): Terrorism in the Twenty-first Century, New Jersy, Prentice Hall.
- Kartha, Tara (1999): Tools and Terror: Light Weapons and India's Security, New Delhi, Knowledge World and ISDA
- Lequer, Walter (1999): The New Terrorism, Oxford, Oxford University Press
- Sondhi M L.(ed), (1999): Terrorism and Political Violence-A Source Book, New Delhi
- Wardlaw, Grant(1982): Political Terrorism, Cambridge

Or

DSE-1B: Role of NCC in Nation Building

Credits 06

DSE1BT: Role of NCC in Nation Building

Credits 06

Unit 1: National Integration:

- a) Concept, Importance, Religion, Culture, Tradition and Customs of India,
- b) National Interests and National Threats,
- c) Problems and Challenges of National Integration-Social Disparity, Linguistic, Fanaticism, Casteism, Regionalism, Communalism, Economic inequalities-Poverty, Unemployment, Growth of Population, Corruption;
- d) Opportunities- Defence & Police Force, National Games
- e) NCC's Role in Unifying India

Unit 2: Social Service and Community Development

- a) Introduction, Weaker Section of Society and their Needs
- b) Contribution of NCC towards Social Welfare
- c) NGO's Role and Contribution

Unit 3: Human Rights

- a) Fundamental Rights, Duties of Citizen;
- b) Human Right Organizations;
- c) Rural Development Programmes: MGNREGA, SGSY, JGSY, IAY, NASP, PMGSY
- d) Contribution of NCC towards Community Development

Unit 4: Aid to Civil Authority

- a) Disaster Management: introduction, Types of Natural Disaster, Role of NCC in various Disasters
- b) Civil Defence, Organization of Civil Defence; Role of NCC;
- c) Fire Fighting-Fire Fighting Equipments, Role of NCC
- d) Role of NCC in Traffic Control

Suggested Books/ Readings:

- NCC Cadet Hand Book
- V. Longer: Youth In Step
- NCC Common Subject
- Lt G. D. Singh, Pvsm, Vsm: Field Marshal S. Manekshaw (Soldiering With Dignity)

Skill Enhancement Course (SEC)

SEC-4: Indian Air Force (Specialized Subject)

Credits 02

SEC4T: Indian Air Force (Specialized Subject)

Credits 02

Course contents:

Unit I: General Service Knowledge

- a) Development of Aviation
- b) History of Indian Force

Unit II: Principle of Flight

- a) Introduction
- b) Laws of Motion
- c) Glossary of Terms

Unit III: Airmanship

- a) Introduction
- b) Airfield Layout
- c) Role of the Air, Circuit Procedure
- d) ATC/RT Procedures
- e) Aviation Medicine

Unit IV: Maintenance

- a) Aero Engine Introduction
- b) Minimum Mechanical Knowledge for Maintenance
- c) Ammunition, Fire Power, Stripping, Assembling and Cleaning

Suggested Readings:

- DG NCC, New Delhi: Cadet's Handbook- Common Subjects, All Wings
- DG NCC, New Delhi: Specialized Subjects, Army, Navy and Air Force
- DG NCC, New Delhi: OTA Precise
- Gupta, N. L.: Humanistic Traditions of India, Mohit Publications, New Delhi
- Iyer Prakash: The Habit of Winning, Penguine India, 2011
- Goldratt E: The Goal, The North River Press, 1994
- Bipan Chanda: Freedom Struggle, National Book Trust
- Lambert M & Henssonow F: National Civil Defence Cadet Corps, 2011

SEC-4:	Current Affair	rs and General	l Studies
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Credits 02

SEC4T: Current Affairs and General Studies

Credits 02

Course contents:

Unit I: Topic on Current Affairs, General Awareness in National and International Significance

Unit II: General Knowledge Syllabus & Topics of the Indian and World History along with Freedom Movement in India

Unit III: General Knowledge and Current Affairs Topics on Indian Polity, Indian Constitution, Government, Government Policy and Political System

Unit IV: General Knowledge Questions on Environmental Science, Biodiversity and Ecology related Topics

Suggested Readings:

• Newspapers; Journals; Magazines

Generic Elective (GE)

GE-2: International Relations

Credits 06

GE2T: International Relations

Credits 04

Course contents:

Unit I: Introduction to the Understanding of International Relations, Theories and Approaches

Unit II: Diplomacy and Foreign Policy: Theoretical Background, Contemporary Issues in Indian Context

Unit III: International Relation of India with its Neighbouring Countries (Pakistan, Bangladesh, Nepal, Sri Lanka, Bhutan and China)

Unit IV: End of Cold War and Emergence of New World Order (after 9/11/2001)

GE2P: Practical Credits 02

Course contents:

1. Laboratory Note Book: Strategic Maps of India: India and her Neighbouring Countries; India and Indian States and Union Territories with Capital, Strategic Raw Materials, Defence Industries and Atomic Reactors

- 2. Short Presentation/ Lecture
- 3. Records
- 4. VIVA VOCE

Suggested Books/ Readings

- Aron, Raymond (2003) Peace and War: A Theory of International Relations, Transaction Publishers
- Couloumbis, T. A and Wolfe, W. H. (1986): International Relations: Power and Justice, Prentice Hall, New Jersey
- Kumar Mahendra (2017): Theoretical Aspects of International Politics, Shivlal Agarwala and Co, New Delhi.
- Frenkel Joseph (1968): Making of Foreign Policy: An Analysis of Decision Making, Oxford University Press, London
- Calvocoressi, Peter (2008): World Politics Since 1945, 9th Edition, Longman

Or

GE-2: India and Her Neighbouring Countries

Credits 06

GE2T: India and Her Neighbouring Countries

Credits 04

Course contents:

Unit I: India and her Neighbouring Countries

Study of Geo-Strategic Factors Relating to Pakistan, China, Bangladesh, Nepal, Bhutan, Myanmar, Maldives, and Sri Lanka

Unit II: Emergence of Pakistan as an Independent State

Pakistan's foreign and Defence Policies to India; Recent Trends of Bilateral Relations between Bangladesh and India

Unit III: Emergence of China and Global Power Policies

Political System in China, Ethnic Composition of China; Recent Trends of Bilateral Relations between China

Unit IV: Emergence of Bangladesh as an Independent State

Strategic Relations of India with Bangladesh; Recent Trends of Bilateral Relations between Bangladesh

Unit V: Strategic Relations of India

Strategic Relations of India with Nepal, Bhutan, Myanmar, Maldives and Sri Lanka; The issue of Immigration and Infiltration.

GE2P: Practical Credits 02

Course contents:

- 1. Strategic Maps of India and her Neighbours with identification of and Special emphasis on Strategic Geographical locations, boundaries, Cities, Transport and Communication, Strategic Raw Materials, Defence Industries and Atomic Reactors, National Anthem, Symbol, Flower, Language, Culture and Customs.
- 2. Short Presentation/ Lecture
- 3. Records
- 4. Viva Voce

Suggested Readings

- U. S. Bajpai: India and Its Neighbours
- C. P. Bhambri: Foreign Policy of India
- A. Shah: Indian Defence and Foreign Politics
- Cohen, Stephen Philip: The Idea of Pakistan
- Veena, Kukreja: Contemporary Pakistan, Political Processes, Conflict and Cases
- Iftikar H. Malik; Culture and Customs of Pakistan
