



**BHARATHIDASAN UNIVERSITY , TIRUCHIRAPPALLI - 620 024**

**B.A./B.Sc./B.Com./B.B.A./B.C.A.**

**NON MAJOR ELECTIVE COURSE - NCC**

**CHOICE BASED CREDIT SYSTEM –LEARNING OUTCOMES BASED**

**CURRICULUM FRAMEWORK (CBCS - LOCF)**

**(Applicable to the candidates admitted from the academic year 2022-2023 onwards)**

Sem.	Part	Types of the Courses	Title of the Paper	Ins. Hrs.	Credits	Exam. Hours	Maximum Marks		
							Int.	Ext.	Total
III		Non Major Elective Course - I	Introduction to NCC	2	2	3	25	75	100
IV	IV	Non Major Elective Course - II Optional For Army/Navy/ Air Wing Cadets	1. Special Subject Army (or) 2. Special Subject Navy (or) 3. Special subject Airforce	2	2	3	25	75	100

**NCC Course is one of the Choices in Non-Major Elective Courses. Only the NCC cadets are eligible to choose this course. However, NCC Course is not a Compulsory Course for the NCC Cadets.**

## **NON MAJOR ELECTIVE : THE NCC**

### **COURSE OBJECTIVE**

- The NCC training curriculum is structured in a manner to instil in the cadet's qualities like nationalism, patriotism, discipline, team spirit, esprit-de-corps, leadership, self-confidence, national integration and improve their personality.

### **THE TRAINING IS CONDUCTED WITH THE FOLLOWING SPECIFIC PURPOSE:-**

- To expose young cadets to a regimental way of life, which is essential to inculcate in them the values of discipline, duty, punctuality, orderliness, smartness, and respect for authority, correct work ethos and self-confidence.
- To generate interest in cadets by including and laying emphasis on those aspects of institutional training which attract youth and provide them an element of thrill and excitement.
- To inculcate Defence Services work ethos, which is characterized by hard work, sincerity of purpose, honesty, ideals of selfless service, dignity of labour, secular outlook, comradeship, spirit of adventure and sportsmanship.

### **OBJECTIVES :**

- To Motivate young dynamic youth to serve the nation.
- To Inculcate unity and discipline amongst citizens.
- To Promote leadership and make self-reliant citizens.
- To Prepare a volunteer force to participate during national disasters.
- To Raise awareness to live with principles and values.
- To Gain a glimpse and overview of armed forces.
- To Create awareness about social causes and community development.
- To Inculcate sportsmanship and spirit of adventure.
- To Learn about road safety and traffic control
- To Learn about life saving and first aid.

\*\*\*\*\*

**Second Year**

**NON MAJOR ELECTIVE COURSE-I  
INTRODUCTION TO NCC**

**Semester-III**

**Code:**

**(Theory)**

**Credit:2**

**CORSE OBJECTIVES :**

- To acquaint cadets with the aims and objectives of NCC
- To train Cadets to assist Civil Administration in performance of selective duties during disasters.
- To develop an all-round dynamic personality with adequate leadership traits to deal / contribute effectively in all walks of life.
- To teach cadets the values and skills involved in providing voluntary Social Service.
- To know respect and responsibility towards personal health and hygiene.

**UNIT –I THE NCC, NATIONAL INTEGRATION AND AWARENESS :**

NCC - History, aim and Objectives- Organisation and Training - Incentives of Joining NCC, Duties of NCC Cadets, Types of NCC Camps. National Integration - Religions, Culture, Traditions and Customs of India, Importance and necessity of National Integration, Problems/ Challenges/Threats of National Integration, Unity in Diversity. Famous Leaders of India. Slogans for National Integration. Contribution of Youth to Nation Building and Role of NCC in Nation Building.

**UNIT -II CIVIL AFFAIRS AND SOCIAL AWARENESS COMMUNITY DEVELOPMENT:**

Civil Defence Organization and its duties ( NDMA,SDMA, DDMA,NDRF) Types of Natural Hazards- Role of NCC during Natural Hazards/ Calamities - Essential services. Social Services – Basics and Needs of Social Service - Social awareness - Social/ Rural Development Projects. Contribution of youth towards social welfare, Civic responsibilities. Role of Youth in Corruption, dowry, female foeticide, Drug abuse and Causes and prevention of HIV/AIDS, NGOs and their contribution in social Welfare.

**UNIT -III PERSONALITY DEVELOPMENT:**

Personality development – Introduction, Physical, Social, Psychological and philosophical Factors influencing personality. Self-Awareness – know yourself, Thinking- meaning and Concepts - Critical and creative thinking. Problem solving skills - Interview skills - Importance of group and team work - Coping with stress / emotions - Characteristics of healthy personalities – ethics/values

**UNIT- IV HEALTH AND HYGIENE:**

Structure and functioning of the human body - Hygiene and sanitation (Personal and Food Hygiene) - Physical and mental health - Infectious and contagious diseases and its prevention - Basics of first aid in common medical emergencies - Wounds and fractures - Introduction to yoga (Purpose and benefits of Padmasana, Surya Namaskar, Vajrasana, Sarvangasana, Siddhasana).

## **UNIT -V ENVIRONMENT AWARENESS AND CONSERVATION:**

Natural resources – conservation and management - Water conservation and rain water harvesting - Waste management - Pollution – types and its control, water, air, noise, soil- Wildlife conservation: projects in India

## **UNIT – VI CURRENT CONTOURS: (For Continuous Internal Assessment only):**

Students are allowed to practice Drill, word of Commands. Instruct the students to understand current affairs by reading leading newspapers.

### **REFERENCE:**

1. Cadet Hand Book (Common Subjects), published by DGNCC.
2. Cadet Hand Book (Specialized Subjects), published by DGNCC.
3. <https://modernschoolnagpur.edu.in/ncc-study-material/>
4. <https://nccorissa.org/old/Doc/Ncc-CadetHandbook.pdf>
5. <https://indiancc.nic.in/anos-handbook/>
6. R Guptas NCC Army wing. Ramesh Publishing House, New Delhi, 2021.

### **COURSE LEARNING OUTCOME**

After completion of this Course Cadets will be able to

- Understand aims and objectives of NCC
- Understand the sense of patriotism, secular values
- Contribute towards nation building through national unity and social cohesion.
- Cadets would assist Civil Administration in performance of selective duties during disasters
- Develop personality with adequate leadership traits.
- Understand the responsibility towards personal health and hygiene.
- Sensitise the cadets on natural resource conservation and protection of environment.

\*\*\*\*

**Second Year**

**NON MAJOR ELECTIVE COURSE-II  
1. SPECIALISED SUBJECTS -ARMY**

**Semester-IV**

**Code:**

**(Theory)**

**Credit:2**

**COURSE OBJECTIVES:**

- To acquaint cadets with the Armed Forces
- To provide knowledge of renowned Military Generals, PVCs and Indo-Pak Wars
- To teach cadets elementary map reading
- To teach cadets elementary field craft and battle craft
- To introduce cadets to the latest trends in the field of communications

**UNIT -I ARMED FORCES:**

Basic organization of Armed Forces - Organisation of the Army - Badges and Ranks - Honours and Awards - Modes of entry into Army -Fighting Arms - Supporting Arms and Services

**UNIT- II MAP READING:**

Introduction to types of Maps and conventional signs.-Scales and grid system - Topographical forms and technical terms - Relief, contours and gradients - Cardinal points and Types of North. Types of bearing- Use of service Protractor –Prismatic Compass – setting up of a Map, Finding north and own position.

**UNIT- III FIELD CRAFT AND BATTLE CRAFT:**

Introduction - Judging distance - Description of ground - Recognition, description and indication of land marks and targets - Observation, camouflage and concealment - Field signals - Use of ground and movement - Selection of formations - Knots and Lashing.

**UNIT -IV COMMUNICATION AND LEADERSHIP:**

Introduction – Types and Importance of communication - Means of communication - Modern methods of communication- radio telephony – Characteristics of Walkie talkie- The military alphabets in communication- Latest trends in communication – Leadership – types of leadership-Qualities of a leader – Leadership traits - Working in Teams & Groups. Case study – Swami Vivekananda, Rattan Tata, Rabindranath Tagore.

**UNIT -V MILITARY HISTORY:**

Freedom Struggle and Nationalist Movement in India.Biographies of renowned generals (Carriappa/ Manekshaw)- Indian Army War Heroes -Study of battles of indo Pak war 1965, 1971 and Kargil. Role of NCC in 1965 War.

## **UNIT – VI    CURRENT CONTOURS: (For Continuous Internal Assessment only):**

Provide basic information on weapon and weapon training

### **REFERENCE:**

1. Cadet Hand Book (Common Subjects), published by DGNCC.
2. Cadet Hand Book (Specialized Subjects), published by DGNCC.
3. <https://modernschoolnagpur.edu.in/ncc-study-material/>
4. <https://nccorissa.org/old/Doc/Ncc-CadetHandbook.pdf>
5. <https://indiancc.nic.in/anos-handbook/>
6. R Guptas NCC Army wing. Ramesh Publishing House, New Delhi, 2021.

### **COURSE LEARNING OUTCOME**

After completion of this Course Cadets will be able to

- Acquaint cadets with the Armed forces.
- Understand the role of renowned Military Generals, PVCs and Indo-Pak Wars
- Understand the process of map reading and conventional signs.
- Understand elementary field craft and battle craft
- Understand the latest trends in the field of communications
- Understand leadership and its traits.

\*\*\*\*

Code:

(Theory)

Credit:2

**COURSE OBJECTIVES:**

- To impart training on Naval Organization
- To impart basic knowledge of Naval Communication.
- To impart basic knowledge about Seamanship.
- To provide knowledge about Ship Modelling
- To provide knowledge of renowned Military Generals, PVCs and Indo-Pak Wars

**UNIT -I NAVAL ORIENTATION:**

History of Indian Navy - Organization of Navy - Navy head quarters - commands- Fleets- ships and shore establishments- types of warships and their role- Organization of ships and instruction on onboard organization- Organization of Army-Air Force-Navy commands- Naval customs and traditions- Ranks of officers- sailors- equivalent ranks in three services- mode of entry- Branches of Navy and their functions

**UNIT- II NAVAL WARFARE AND ITS COMPONENTS :**

Introduction to Anti submarine warfare and fleet operation- role of aviation- Naval aircrafts and helicopters- types of submarines and their role- ASW weapons and sensors- elementary knowledge of gunnery- missiles and types of mounted guns- Parts of a torpedo- Organization of Ship- RAS- Types of warships.

**UNIT -III SEAMANSHIP:**

Types of ropes and breaking strength, Bends and hitches, knots and their kinds and uses. Types of cordages Introduction to shackles, hooks, blocks and derricks, coiling down and splicing of rope. Types of anchor- Parts of anchor- Use of Blocks. Parts of Blocks- Parts of boat- parts of an oar- Instructions in boat pulling- pulling orders- precautions whaler pulling- whaler and enterprise class boat including theory of sailing elementary sailing rules- power boats and types- securing and towing boats

**UNIT -IV NAVIGATION:**

Navigation of a ship- charts and compass- Map reading- Variation- Deviation- CADET rule- fixing the Ship's position- knots and nautical mile definitions- latitude and longitude markings- types of maps and contours- Types of Compass- Gyro compass- True and magnetic north definitions- Meaning of Flags- GPS- RACON- RADAR- SONAR- Brief characteristics of tides and its effect on ships- causes of tides- tidal streams- clouds- types- formation of clouds and effects- introduction to astronomy- Oceanography, living and non living things in sea, Exclusive economic zone, Marine conservation.

## **UNIT -V NBCD :**

Types of fire- Triangle of fire- Types of fire fighting- water markings in the ship- NBCD organization and structure- Damage control- causes of damage- flooding

## **UNIT – VI CURRENT CONTOURS: (For Continuous Internal Assessment only):**

Provide basic information on weapon and weapon training

## **REFERENCES:**

1. R Guptas NCC Navy wing. Ramesh Publishing House, New Delhi, 2021.
2. Cadet Hand Book (Common Subjects), published by DGNCC.
3. Cadet Hand Book (Specialized Subjects), published by DGNCC.
4. <https://modernschoolnagpur.edu.in/ncc-study-material/>
5. <https://nccorissa.org/old/Doc/Ncc-CadetHandbook.pdf>
6. <https://indiancc.nic.in/anos-handbook/>

## **COURSE LEARNING OUTCOME**

After completion of this Course Cadets will be able to

- Get training on Naval Organization
- Have basic knowledge of Naval Communication.
- Understand basic knowledge about Seamanship.
- Provide knowledge about Ship Modelling
- Provide knowledge of renowned Military Generals, PVCs and Indo-Pak Wars

\*\*\*



Second Year

**NON MAJOR ELECTIVE COURSE-II  
3. SPECIALISED SUBJECTS - AIR FORCE**

Semester-IV

**Code:**

**(Theory)**

**Credit:2**

**COURSE OBJECTIVES**

- To impart basic knowledge of IAF and Air Campaigns
- To provide knowledge about Aero Modelling
- To introduce principles of flight
- To provide knowledge of Aircraft Parts
- To provide knowledge of Aircraft Instruments and Air Crafts

**UNIT -I ORGANIZATION & STRUCTURE OF IAF:**

IAF: Introduction – Organization of Air Force – Branches – History of IAF- Air Campaigns in India -Station -Careers in IAF.

**UNIT- II AIR CRAFTS RECOGNITION (ACR):**

Air Craft Recognition: Identification of Aircraft – shapes – Types of Aircrafts – Foreign Aircrafts - Latest trends and Acquisitions.

**UNIT- III AIRMANSHIP (AR):**

Airmanship: Introduction – Airfield Layout – Rules of the Air – ATC/RT Procedures – Circuit Procedures – Aviation Medicine & Survival.

**UNIT -IV AIR NAVIGATION (NV):**

Navigation: Meaning – Air Navigation – Requirement of Navigation – Terms used in Navigations; Maps: Uses – Map Reading -Fundamentals of Map Reading; Meteorology (MET): Importance – Atmosphere – Clouds & Precipitation- Visibility

**UNIT -V AERO MODELLING & AIRFRAMES:**

Aero-Modelling (AM): Types – Materials used for Aero-modelling – Building of Aero Models: Static – Flying; History of Aero Modelling; Airframes: Aircraft controls – Main & Tail Plane – Landing Gear; Instruments: Basic Flight Instruments – Radars.

**UNIT - VI CURRENT CONTOURS: (For Continuous Internal Assessment only):**

Provide basic information on weapon and weapon training

## REFERENCES :

1. <https://modernschoolnagpur.edu.in/wp-content/uploads/2020/02/JDJW-Final-AF.pdf>
2. R Guptas NCC Air Force. Ramesh Publishing House, New Delhi, 2021.
3. <https://modernschoolnagpur.edu.in/ncc-study-material/>
4. <https://nccorissa.org/old/Doc/Ncc-CadetHandbook.pdf>
5. <https://indiancc.nic.in/anos-handbook/>
6. Cadet Hand Book (Common Subjects), published by DGNCC.
7. Cadet Hand Book (Specialized Subjects), published by DGNCC.
8. IFA (Air Force) Manual, Controller General of Defence Accounts, New Delhi, 2008.

## COURSE LEARNING OUTCOME:

After completion of this Course Cadets will be able to

- Understand basic knowledge of IAF
- Understand basic knowledge of Air Campaigns
- Provide knowledge about Aero Modelling
- Understand the principles of flight
- Know the Parts of Aircraft.
- Understand Airfields
- Know about wireless communication and Leadership traits.

\*\*\*\*