NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL



Minor in

NCC

SCHEME OF INSTRUCTION AND SYLLABI

(for all B.Tech. students)

(Effective from 2021-22)

SCHEME OF INSTRUCTION

Minor Program – NCC

Special Instructions:

- **The curriculum** is proposed by NCC Group Head Quarters to offer NCC as a Minor program.
- **Eligibility:** The students who are the cadets of NCC at school level are only eligible and hence the CGPA eligibility for this Minor is relaxed.
- **Starts from First Semester:** The Minor program in NCC starts from I Year, I Sem and completing by III Year, II Semester
- **Credits for Practical training:** The credit for NCC-Practical is also to be considered equal to that of L (T) because of the intensity of the training in Practical and Camps.

S. No.	Course Code	Name of the Course	L	T	P	Credits	Sem.
1	ICM01	NCC Foundation Course: Part 1	1	1	0	2	I
2	ICM02	NCC Foundation Course: Part 2	1	1	0	2	II
3	ICM03	NCC Intermediate Course: Part 1	1	1	3*	5	III
4	ICM04	NCC Intermediate Course: Part 2	1	1	0	2	IV
5	ICM05	NCC Advance Course: Part 1	1	1	3*	5	V
6	ICM06	NCC Advance Course: Part 2	1	1	0	2	VI
		Total				**18**	

* 3 Credits for summer camps at the end of 2nd and 4th semesters are shown in 3rd and 5th semesters

DETAILED SYLLABUS

Minor – NCC

Course Code: NCCM01	NCC FOUNDATION COURSE: PART-1	Credits 1-1-0: 2

Pre-requisites: None

Course Outcomes: At the end of the course, the student will be able to:

CO1	Imbibe the conduct of NCC cadets.
CO2	Respect the diversity of different Indian culture.
CO3	Practice togetherness in all walks of their life.
CO4	Use different strategies for stress management.
CO5	Make a team and will work together for achieving the common goals.
CO6	Do the social services on different occasions

Syllabus:

a) Theory Component:

Unit-I. NCC General: Introduction of NCC, History, AIMS, Objective of NCC & NCC as organization, Incentives of NCC, Duties of NCC cadet. NCC camps: Types & Conduct.

Unit-II. National Integration & Awareness: National Integration: Importance & Necessity, Factors Affecting National Integration, Unity in Diversity & Role of NCC in National Building, Threats to National Security.

Unit-III. Social Service and Community Development: Basics of social service and its need, types of social service activities, objectives of rural development programs and its importance, NGO's and their contribution in social welfare, contribution of youth and NCC in social welfare.

Unit-IV. Personality Development: Intra & Interpersonal skills, self-awareness SOWT analysis, Emotional Intelligence, Time Management, Stress Management, Inter-personal Relations, change your mind set, Teamwork, CIVIC sense

b) Practical Content

Unit-I. DRILL: Foot Drill- Drill ki Aam Hidayaten, Word ki command, Savdhan, Vishram, Aram se.

Unit-II. Weapon Training: Introduction & Characteristics of 0.22 Riffle, Handling of 0.22 Riffle.

Unit-III. Map Reading (MR): Definition of Map, Conventional signs, scale and Grid System, Topographical forms and Technical terms, Relief, Contours and Gradients, Cardinal points and types of North, Magnetic Variation and Grid Convergence.

Unit-IV. Field Craft & Battle Craft: Introduction of Field Craft & Battle Craft, Judging distance, Method of Judging distance.

Unit-V. Social Service and community Development: Cadets will participate in various activities throughout the semester, e.g.: Blood donation camp, Swachhata Abhiyan, Constitution Day, Beti Bachao Beti Padhao etc.

Learning Resources:

Reference Books:

1. Cadets Hand Book (ARMY), Common subject
2. Cadets Hand Book (ARMY), Specialized subject

Online Resources:

1. https://indiancc.nic.in

Course Code: NCCM02	NCC FOUNDATION COURSE: PART-2	Credits 1-1-0: 2

Pre-requisites: NCCM01

Course Outcomes: At the end of the course, the student will be able to:

CO1	Define thinking, reasoning, critical thinking and creative thinking
CO2	To think critically about different life related issues
CO3	Think divergently and will try to break functional fixedness

Syllabus:

a) Theory Content

Unit-I. Personality Development: Thinking- Meaning and Concept of thinking, Reasoning, Process of thinking, Critical Thinking- Meaning & concept of critical thinking, Features of critical thinking, Process of critical thinking, Creative Thinking- Meaning & concept of creative thinking, Features of creative thinking, Process of creative thinking, levels of creativity, Characteristics of creative person.

Unit-II. Leadership Development: Leadership capsule, Important Leadership traits, Indicators of leadership and evaluation, Motivation-Meaning & concept, Types of motivation, Factors affecting motivation, Ethics and Honor codes.

Unit-III. Disaster Management: Disaster Management Capsule, Introduction to disaster management, National Disaster Management Authority (NDMA) organization and functions, National Disaster Response force- Organization and functions, Types of Disasters- Natural & Man made, Role of NCC Cadets during the disaster, Types of Maintenance required for essential services.

Unit-IV. Social Service and Community Development: Protection of Children & Women safety Creatively in their real-life problems

b) Practical Content

Unit-I. DRILL: Foot Drill, Dahine, Baen, Aage aur Piche Kadam Lena, Tej Chal se Murdna, Tej Chal se Salute Karna, Tej kadam Taal aur Tham, Tej Kadam Taal se Kadam Badalna, Teeno Teen se Ek File aur ek file se Teeno Teen Banana

Unit-II. Weapon Training: Range procedure & Theory of group, Short Range firing

Unit-III. Map Reading (MR): Protractor Bearing and its conversion methods, service protractor and its uses, Prismatic compass and its uses and GPS, Navigation by compass and GPS

Unit-IV. Field Craft & Battle Craft: Indications of landmarks and Targets, Intro, Definitions, Types of Ground, Indication of Landmarks, Methods of identification of targets, difficult targets

Unit-V. Social Service and Community Development: Cadets will participate in various activities throughout the semester, e.g. : Blood donation camp, Swachhata Abhiyan, Constitution Day, Jan Jeevan Hariyali Abhiyan, Beti Bachao Beti Padhao etc.., as per the requirement and similar announced days- National level.

Learning Resources:

Reference Books:

1. Cadets Hand Book (ARMY), Common subject
2. Cadets Hand Book (ARMY), Specialized subject

Online Resources:

1. https://indiancc.nic.in

Course Code: NCCM03	NCC INTERMEDIATE COURSE: PART-1	Credits 1-1-3: 5

Pre-requisites: NCCM02

Course Outcomes: At the end of the course, the student will be able to:

CO1	Define and identify the problem
CO2	Take decisions their decision effectively
CO3	Manage crises in real life settling

Syllabus:

Theory Content:

Unit-I. Personality Development: Problem solving & Decision Making, Problem Solving- Meaning & concept of problem, Types of problem, Representation of problem, Process of problem-solving (Real life problems), crises Management, Decision Making- meaning nature, characteristics, elements and process.

Practical Content:

Unit-I. DRILL: Arm Drill, Rifle ke saath Savdhan, Vishram aur Aram se, Rifle ke saath Parade Par aur Saj, Rifle ke saath Visarjan, Line Tod, Bhumi Shastra aur Uthao Shastra, Bagal Shastra aur Baju Shastra

Unit-II. Weapon Training: Short Range firing

Unit-III. Map Reading (MR): Setting of Map, Findings North and Own Position

Unit-IV: Field Craft & Battle Craft: Observation camouflage and Concealment

Unit-V. Social Service and Community Development: Cadets will participate in various activities throughout the semester, e.g.: Blood donation camp, Swachhata Abhiyan, Constitution Day, Jan Jeevan Hariyali Abhiyan, Beti Bachao Beti Padhao etc.., as per the requirement and similar announced days- National level.

Unit-VI. Obstacle Training: Obstacle training- Introduction, Safety-measures, Benefits, Obstacle Course- Straight balance, Clear Jump, Gate Vault, Zig-Zag Balance, High Wall

Learning Resources:

Reference Books:

1. Cadets Hand Book (ARMY), Common subject
2. Cadets Hand Book (ARMY), Specialized subject

Online Resources:

1. https://indiancc.nic.in

Course Code: NCCM04	NCC INTERMEDIATE COURSE: PART-2	Credits 1-1-0: 2

Pre-requisites: NCCM03

Course Outcomes: At the end of the course, the student will be able to:

CO1	Be motivated to join the army
CO2	Develop the qualities of effective speakers
CO3	Communicate effectively
CO4	Lead some formals and informal groups for achieving the common goals

Syllabus:

Theory Content:

Unit-I. Personality Development: Communication Skills-Understanding basics of communication, Component of effective communication skills, Common barriers in effective communication skills, how to reduce communication gap, Public Speaking Skills- Stage presentation, Voice control, Body language, Delivery, Audience relation, Group Discussions.
Unit-II. Leadership Development: Case Studies- Shivaji, APJ Abdul Kalam, Deepa Malik, Maharana Pratap, Ratan Tata, Kiran Majumdar, Jhansi Ki Rani, Narayana Murthy, Prakash Padukone, Tipu Sultan, Rabindra Nath Tagore
Unit-III. Disaster Management: Creation of Groups, Civil defense services and their duties, Initiative training, Organizational Skills and Do's and Don'ts natural and manmade Disasters, Tipes of save life, Fire services and Fire Fighting.

Unit-IV. Military History: Biographies of renowned Generals

Practical Content:

Unit-I. DRILL: Arm Drill, Salami Shastra, Squad Drill
Unit-II. Weapon Training: Short Range firing
Unit-III. Map Reading (MR): Map to Ground, Ground to Map
Unit-IV. Field Craft & Battle Craft: Fire and Move Capsule, Field signal-with hand, with Weapons, Signal with whistle, Field signals as means of giving orders, Field signals by day, Field signals by night, selection formation
Unit-V. Social Service and Community Development: Cadets will participate in various activities throughout the semester, e.g.: Blood donation camp, Swachhata Abhiyan, Constitution Day, Jan Jeevan Hariyali Abhiyan, Beti Bachao Beti Padhao etc.., as per the requirement and similar announced days- National level.
Unit-VI. Health & Hygiene: Hygiene & Sanitation (Hygiene-Personal & Camp Hygiene), First Aid in common medical emergencies, Treatment & Care of Wounds

Learning Resources:

Reference Books:

1. Cadets Hand Book (ARMY), Common subject
2. Cadets Hand Book (ARMY), Specialized subject

Online Resources:

1. https://indiancc.nic.in

Course Code: NCCM05	NCC ADVANCE COURSE: PART-1	Credits 1-1-3: 5

Pre-requisites: NCCM04

Course Outcomes: At the end of the course, the student will be able to:

CO1	Get motivated to join arm forces
CO2	Write their CV effective and appealing
CO3	Face interview effectively in their future
CO4	Imbibe the feeling of patriotism

Syllabus:

Theory Content:

Unit-I. Personality Development: Career counselling- Introduction of Career counselling, Need and Benefits, SSB Procedure- Screening test, Psychological test, Team work, Group Discussion etc., Interview Skill- CV writing, Interview Skills-Before interview, and conducting yourself during interview.

Unit-II. Armed Forces: Armed Forces, Command Head Quarters- Armed force (Army, Navy, Air Force), Police organizations and Central Armed Police Forces, Badges, Ranks, Honours and awards- Armed Force, Police and Central Armed Police Forces.

Unit-III. Military History: Study of battles of Indo-Pak War 1965, War Movies and war Hero (Paramveer Chakra)

Practical Content:

Unit-I. DRILL: Ceremonial Drill- Guard Mounting
Unit-II. Weapon Training: Short Range firing
Unit-III. Map Reading (MR): Google Maps & applications
Unit-IV. Field Craft & Battle Craft: Fire control orders, Types of fire control orders, Fire and Movement- When to use fire and movement tactics, Basic considerations, Appreciation of ground cover, Types of cover, Dead ground, Common Mistakes, Map and air photography, Selection of Fire position and fire control.
Unit-V. Social Service and Community Development: Cadets will participate in various activities throughout the semester, e.g. : Blood donation camp, Swachhata Abhiyan, Constitution Day, Jan Jeevan Hariyali Abhiyan, Beti Bachao Beti Padhao etc.., as per the requirement and similar announced days- National level.
Unit-VI. Health & Hygiene: Yoga- Introduction, Definition, Purpose, Benefits. Asanas- Padamsana, Siddhasana, Gyan Mudra, Surya Namaskar, Shavasana, Vajrasana, Dhanurasana, Chakrasana, Sarvaangasana, Halasana, etc
Unit-VII. Obstacle Training: Obstacle training- Intro, Safety measures, Benefits, Obstacle Course- Straight balance, Clear 'Jump, Gate Vault, Zig-Zag Balance, High Wall

Learning Resources:

Reference Books:

1. Cadets Hand Book (ARMY), Common subject
2. Cadets Hand Book (ARMY), Specialized subject

Online Resources:

1. https://indiancc.nic.in

Course Code: NCCM06	NCC ADVANCE COURSE: PART-2	Credits 1-1-0: 2

Pre-requisites: NCCM06

Course Outcomes: At the end of the course, the student will be able to:

CO1	Use RT during different activities
CO2	Use the multimedia, video conferencing, IT etc. efficiently in day-to-day life

Syllabus:

Theory Content:

Unit-I. Social Service and Community Development
Unit-II. Armed Forces: Roles and task of army, Police, CAPF, Other Central Investigation and Intelligence Agencies, Modes of entry to Army & Police, CAPF
Unit-III. Military History: Study of battles of Indo-Pak War 1971, Kargil, War Movies and war Hero (Paramveer Chakra)
Unit-IV. Introduction of Infantry Weapons & Equipment: Organization of Infantry Battalion, Company Support Weapons, Battalion Support Weapons.
Unit-V. Communication: Introduction to Communication and Latest Trends, Line communication, Radio Communication, Radio Relay, Characteristics of Wireless Technology-Features, Equipment and limitations, Characteristics of Walkie/Talkies, Features and its use. Latest trends and Development in communication

Practical Content:

Unit-I. DRILL: Ceremonial Drill- Guard of Honor
Unit-II. Weapon Training: Short Range firing
Unit-III. Map Reading (MR): Google Maps & applications
Unit-IV. Field Craft & Battle Craft: Knots, Lashing and Stretchers
Unit-V. Social Service and Community Development: Cadets will participate in various activities throughout the semester, e.g.: Blood donation camp, Swachhata Abhiyan, Constitution Day, Jan Jeevan Hariyali Abhiyan, Beti Bachao Beti Padhao etc.., as per the requirement and similar announced days- National level.
Unit-VI. Introduction of Infantry Weapons & Equipment: Characteristics of 5.56mm INSAS rifle, Ammunition, Fire Power, Stripping, Assembling & Cleaning Practice
Unit-VII. Communication (COM): Basic Radio Telephony (RT) Procedure, Introduction, Advantages, Disadvantages, Need for standard procedures, Types of Radio telephony communication, Radio telephony procedure, Documentation.

Learning Resources:

Reference Books:
1. Cadets Hand Book (ARMY), Common subject
2. Cadets Hand Book (ARMY), Specialized subject

Online Resources:
1. https://indiancc.nic.in