



ACHARYA'S NRV SCHOOL OF ARCHITECTURE
SOLADEVANAHALLI, BENGALURU -560107

SPORTS ACADEMY AND REHABILITATION CENTER
ARCHITECTURE DESIGN PROJECT (THESIS) – 2023-24

Submitted in partial fulfillment of the Requirements for the
“Bachelor of Architecture” Degree Course

Submittedby : Aradhana.N
USN : 1AA19AT010
Guide : Ar.Gayathri.S.Pillai

A project report submitted to
VISVESHVARAYA TECHNOLOGICAL UNIVERSITY
“Jnana Sangama”, Machhe, Belgaum – 590018

ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಳಗಾವಿ - ೫೯೦೦೧೮



CERTIFICATE

This is to certify that this thesis report titled **SPORTS ACADEMY AND REHABILITATION CENTER** by **Aradhana.N** of IX SEMESTER B. Arch, USN No. **1AA19AT010**, has been submitted in partial fulfillment of the requirements for the award of under graduate degree **Bachelor of Architecture (B.Arch)** by Visveshwaraya Technological University VTU, Belgaum during the year 2023- 24.

Guide: Ar Gayathri.S.Pillai

Principal

Examined by :

1) Internal Examiner:

2) External examiner 1:

3) External examiner 2:

DECLARATION

This thesis title “**Sports Academy and Rehabilitation Center**”, submitted in partial fulfillment of the requirement for the award of the under graduate of Bachelor of architecture is my original work to the best of my knowledge.

The sources for the various information and the data used have been duly acknowledged.

The work has not been submitted or provided to any other institution/ organization for any diploma/degree or any other purpose.

I take full responsibility for the content in this report and in the event of any conflict or dispute if any, hereby indemnify Acharya’s NRV School of Architecture and Visveshwaraya Technological University, Belagavi, and its official representatives against any damages that any raise thereof.

ARADHANA.N

1AA19AT010

CONTENTS

ABSTRACT	3
ACKNOWLEDGEMENT	4
LIST OF FIGURES:	5
LIST OF TABLES:	9
1. INTRODUCTION:	10
1.1Background study:	10
1.1.1Sports academy:.....	10
1.1.2Importance of sports:	10
1.1.3Sports cultural:.....	10
1.1.4India:	11
1.1.5 Karnataka:	12
1.1.6Mysore:	13
1.1.7Injuries:	13
1.1.8 Sports rehabilitation:.....	14
1.2: Aim And Objective	17
1.2.1 Aim	17
1.2.5 Limitations:	18
1.3: Methodology	18
1.4. Special Study:	19
1.4.1 Sports Injuries:	19
1.4.1.1sprain:.....	20
1.4.1.2 Strains:	21
1.4.1.4 Side Stitches:	21
1.4.1.5 Fractures:	21
1.4.1.3 Dislocation	21
1.4.1.7 Shoulder Impingement Syndrome:.....	22
1.4.1.6 Low Back Pain:.....	22

1.4.1.8 Tennis Elbow:	22
1.4.1.12 Jumper's Knee:	23
1.4.1.10 Runner's Knee	23
1.4.1.9 Javelin's Elbow	23
1.4.1.11 Shin Splints:	23
1.4.2 Methods Of Treatments:	24
1.4.2.1 Physiotherapy:	24
1.4.2.2 Hydrotherapy:	24
1.4.2.3 arthroscopy:	25
1.4.2.4 Mud Bath Therapy:	25
1.4.2.5 Dry Needle Therapy	25
2. LITERATURE STUDY:	26
2.1 Beit Halochem Rehabilitation Center:	26
2.2 Scunthorpe Sport Academy:	31
3. CASE STUDIES:	36
3.1 Padukone-Draavid Center For Sports Excellence	36
3.2. Asm (Agilitysportsmed) Sports Medicine And Orthopedic Centre:	42
4. STANDARDS:	47
4.1 Athletics Track:	47
4.2 Swimming Pool :	47
4.6 Badminton:	48
4.5 Tennis:	48
4.4 Cricket Ground:	48
4.3 Football Court:	48
4.9 Squesh Court:	49
4.8volleybal:	49
4.7 Basketball:	49
4.11 Shooting:	49
4.10 Archery:	49

4.12 Boxing:.....	50
4.13 Table Tennis:.....	50
4.14 Kabaddi:	50
4.15 Kho Kho :	50
4.18 Gym Room:.....	51
4.17 Changing Room:	51
4.16 Weightlifting Mat:	51
4.20 Scanner Rooms:	52
4.19 Nurse Working Area:	52
4.21 Physiotherapy:.....	53
4.22 Hydrotherapy Pool:	54
4.26 Lift:.....	55
4.27 Parking:	55
4.24 Room:.....	55
4.25 Washroom:	56
5 SITE ANALYSES:	57
5.1.Site Surrounding:	57
5.2.Access:	57
5.6 Sun Path:	58
5.5 Utility:	58
5.4 Site Dimension:.....	58
5.3 Climatic Condition:.....	58
5.7 Contour:	58
5.8by Law:.....	59
6. AREA STATEMENTS:.....	60
7. DESIGN PROCESS.....	60
8. REFERENCE.....	70

ABSTRACT

These topic is the Sports Academy and Rehabilitation Center, place in the Mysore at the prefer region .as we can see that many people's area interested in the sports activity, and the Karnataka government is also enhancing the facilities and scholarships on the sports and also have a government proposal that states that the government want to construct a sports academy with proper facilities and also a hospital for the injured persons. As we can see that around 30-45% of peoples get back off due to the injures majorly in the youths, so for the treatments what a construction of hospital. And Mysore city was selected because of the climatic conditions and the environment area and also the connectivity of the region to the other states and also as the major academies are in Bangalore city compared to the Mysore city and as it is a upcoming urbanization city. For those studies some of the common injures and the method of treatments can be provided for the hospital and the standard study for the area statements.

ACKNOWLEDGEMENT

I would like to thank god for being there throughout my thesis project.

I would like to convey my deepest gratitude to my Thesis guide Ar.Gayathri.S.Pillai, for guiding me throughout.

I am also thankful and would like to express my sincere gratitude to the Prof. Sanjyot Shah for his support and encouragement during Thesis work.

Thanks are due to the faculty and staff of Acharya's's NRV school of Architecture for their moral support and encouragement during the project work.

I owe immense thanks to my family and friends for their constants love, understanding and support during this challenging endrsvous