



ACHARYA'S NRV SCHOOL OF ARCHITECTURE
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SMRITI VANAM

An Integrated Dementia Research center and Alzheimer's care facility unit
ARCHITECTURE DESIGN PROJECT (THESIS) – 2025-26

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

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CERTIFICATE

This is to certify that this thesis report titled **Smriti Vanam- an Integrated Dementia Research center and Alzheimer's care facility unit** by **Sneha S** of IX SEMESTER B. Arch, USN No. **1AA21AT044**, 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 2025- 26.

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This thesis title “**Smriti Vanam- an Integrated Dementia Research center and Alzheimer’s care facility unit**”, 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.

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Certificate of Plagiarism Check for Thesis

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ABSTRACT

The rapid growth of the ageing population in India, combined with rising cases of Alzheimer's disease and related dementias, has created an urgent need for specialised care environments that extend beyond conventional hospital models. Despite advancements in medical research, dementia care in India remains fragmented, with limited facilities that provide integrated long-term care, therapeutic engagement, caregiver support, and clinical assessment within a unified architectural framework. This thesis responds to this critical gap by proposing **“Smrithi Vanam” — an Integrated Alzheimer's Care Facility and Dementia Research Centre** located on an 18-acre triangular waterfront site on Willingdon Island, Kochi.

The research investigates how architecture can function as an **active therapeutic medium**, shaping behaviour, enhancing memory cues, reducing anxiety, and supporting independence for individuals with cognitive decline. The proposed design incorporates **traditional Kerala architectural elements**—courtyards, verandas, sloping tiled roofs, shaded pathways, and natural materials—to create a homelike, low-stress environment that resonates with regional identity while meeting global standards of dementia-friendly design.

The thesis develops an architectural program that integrates four key components: a residential Alzheimer's care village, memory clinic with diagnostic spaces, and a multidisciplinary dementia research unit. The spatial organisation prioritises **safe freedom of movement, sensory landscapes, visual orientation, environmental comfort, and social interaction**, supported by climate-responsive planning dictated by the site's unique coastal microclimate. The resulting design demonstrates how built environments in India can evolve to provide dignified, culturally rooted, scientifically informed care for one of the country's most vulnerable populations.

This thesis concludes that when architecture, research, caregiving, and landscape work in synergy, they can significantly improve quality of life, support families and caregivers, and contribute meaningfully to the national dementia-care infrastructure. The project proposes a replicable model that bridges the gap between healthcare, community, and cultural identity—positioning architecture at the forefront of dementia care innovation in India.

CONTENTS

CHAPTER 1: THESIS STATEMENT

- 1.1 Introduction
- 1.2 Problem Statement
- 1.3 Aim
- 1.4 Objectives
- 1.5 Scope of the Project
- 1.6 Limitations
- 1.7 Justification for the Project
- 1.8 Design Methodology
- 1.9 Expected Outcomes

CHAPTER 2: LITERATURE REVIEW

2.1 Dementia

- 2.1.1 Alzheimer's Disease
- 2.1.2 Understanding Alzheimer's: A Journey Through the Brain
- 2.1.3 Dementia and Its Prevalence
- 2.1.4 The Indian Context: A Growing Silent Crisis
- 2.1.5 Infrastructure Gap: The Care Crisis

2.2 Design Standards

- 2.2.1 Universal Design Principles
- 2.2.2 Key Design Themes
- 2.2.3 Practical Design Standards

CHAPTER 3: CASE STUDIES

3.1 Literature Project Studies

- 3.1.1 De Hogeweyk, Weesp, Netherlands
- 3.1.2 Alzheimer's Respite Centre, Dublin, Ireland
- 3.1.3 The Garden of Five Senses, New Delhi

3.2 Live Project Case Studies

- 3.2.1 Nightingale Centre for Ageing & Alzheimer's, Bengaluru
- 3.2.2 Karunashraya Hospice, Bengaluru

3.3 Comparative Analysis of Case Studies

CHAPTER 4: PROJECT SITE DETAILS

4.1 Site Selection Process

4.1.1 Criteria for Site Selection

4.2 Site Location and Justification

4.3 Site Context and Analysis

4.4 Site Analysis

4.4.1 Site & Area

4.4.2 Climate & Microclimate

4.4.3 Noise Analysis

4.4.4 Views & Vistas

4.4.5 Accessibility & Circulation

4.4.6 Soil & Ground Conditions

4.4.7 Flooding & Water Sensitivity

4.4.8 Sun Path

4.4.9 Wind Flow

4.4.10 Opportunities & Constraints

4.5 Bylaws and Guidelines

4.5.1 Land Use & Zoning

4.5.2 FAR / FSI

4.5.3 Height Regulations

4.5.4 Setbacks

4.5.5 Parking Requirements

4.5.6 Fire Safety

4.5.7 Accessibility Guidelines

4.5.8 Coastal & Water-Edge Regulations

4.5.9 Dementia-Friendly Design Guidelines

4.5.10 Research & Testing Area Guidelines

CHAPTER 5: PROGRAM FORMULATION

5.1 Area Program

- 5.1.1. Administrative & Support Block
- 5.1.2. Research & Diagnostic Block
- 5.1.3. Alzheimer's Care Facility Unit
- 5.1.4. Outdoor Therapeutic Zones

CHAPTER 6: CONCEPT & DESIGN DEVELOPMENT

- 6.1 Concept of Design
- 6.2 Vision & Planning Approach
- 6.3 Cluster Formation & Zoning Principles
- 6.4 Dementia-Friendly Spatial Strategies
- 6.5 Kerala Vernacular Integration

CHAPTER 7: DESIGN OF PROJECT

- 7.1 Master Plan
- 7.2 Administrative Block
- 7.3 Research Block
- 7.4 Care Facility Unit
- 7.5 Cafeteria
- 7.6 Staff Residence

CHAPTER 8: CONCLUSION

CHAPTER 9: BIBLIOGRAPHY