

RECOMMENDED IMPROVEMENTS IN COURSE CURRICULUM
M. ARCH (HEALTHCARE ARCHITECTURE) - (2026)

(80 CREDITS COURSE)



**F/o Architecture & Ekistics, Jamia Millia Islamia
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M. ARCH (HEALTHCARE ARCHITECTURE)
SCHEME OF EXAMINATION

SEMESTER -1

w.e.f August 2026 Session 2026-27

	CODE	SUBJECT	CLASSES		MARKS				EXAMS (HOURS)	CREDIT
			LECTURE	T/ ST	IA	WR	VV	TOTAL		
OE	HCA-101	Healthcare Architecture Philosophy	2	0	20	30	-	50	3	2
PE	HCA-102	Research Methodology	4	0	40	60	-	100	3	4
PC	HCA-103	Healthcare Planning-I	2	2	40	60	-	100	3	4
SEC	HCA-104	Resilient Hospital Architecture	2	0	20	30	-	50	3	2
PC	HCA-105	Hospital Services-I	2	2	40	60	-	100	3	4
PC	HCA-106	Studio Project- I (Accreditation based)	1	5	90	-	60	150	-	6
	TOTAL		13	9	250	240	60	550	15	22

SEMESTER -2

	CODE	SUBJECT	CLASSES		MARKS				EXAMS (HOURS)	CREDIT
			LECTURE	T/ ST	IA	WR	VV	TOTAL		
OE	HCA-201	Healthcare policies, legislation and Administration	2	0	20	30	-	50	3	2
SEC	HCA-202	Hospital Energy Simulation & BIM	0	2	30	-	20	50	-	2
PC	HCA-203	Healthcare Planning-II	4	0	40	60	-	100	3	4
PE	HCA-204	Dissertation	2	2	60		40	100	-	4
PC	HCA-205	Hospital Services-II	2	2	40	60	-	100	3	4
PC	HCA-206	Studio Project -II (System Integration)	1	5	90	-	60	150	-	6
	TOTAL		11	11	280	150	120	550	9	22

SEMESTER -3

	CODE	SUBJECT	CLASSES		MARKS				EXAMS (HOURS)	CREDIT
			LECTURE	T/ ST	IA	WR	VV	TOTAL		
OE	HCA-301	Safety & Risk Management	1	1	20	30	-	50	3	2
SEC	HCA-302	Global trends, opportunities and strategy in health care	2	0	20	30	-	50	3	2
PC	HCA-303	Healthcare Planning-III	4	0	40	60	-	100	-	4
PE	HCA-304	Hospital Interior Design	1	1	30		20	50	3	2
PC	HCA-305	Hospital Services-III	2	2	40	60		100	3	4
PC	HCA-306	Studio project -III (Super Specialty)	1	5	90	-	60	150		6
	TOTAL		11	09	230	180	80	500	12	20

SEMESTER -4

	CODE	SUBJECT	CLASSES		MARKS				EXAMS (HOURS)	CREDIT
			LECTURE	T/ ST	IA	WR	VV	TOTAL		
SEC	HCA-401	Project Management	2	0	20	30	-	50	3	2
PC	HCA-402	Thesis	2	10	180	-	120	300	-	12
PE	HCA-403	Innovations & Adaptability in Healthcare	1	1	30	-	20	50	-	2
	TOTAL		5	11	230	30	140	400	3	16

Abbreviations followed

T - Tutorial

ST - Studio

IA - Internal Assessment

WR - Written Exam

VV - Viva Voce

Note: As per COA, minimum passing marks are 50% both in IA and UE both

All theory subject has 40:60 ratio of IA and UE and Studio/Dissertation/lab has 60:40 ratio of IA and UE

HCA-101: PHILOSOPHY OF HEALTHCARE ARCHITECTURE

TEACHING HOURS

L	T/ST	TOTAL
2	0	2

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
20	30	-	50	2

OBJECTIVE:

- To make a base of sound understanding of fundamentals and dynamics of Healthcare philosophy and theories in healthcare Architecture.
- To critically analyze the ongoing modern Philosophy of Architecture practices in indian scenario and its impact on healthcare facilities.

METHODOLOGY:

- Lectures and presentations based on field observations, surveys and library studies.

CONTENTS:

- Architecture and human well being
- Healing Environment and Healing power of Architecture
- Hospital as a social institution
- Patient experience and psychology
- Architects as “Doctor’s of building”
- Indian healthcare Architecture-Past, present and Future
- Analytical approach of healthcare Architecture
- History, Theory, Criticism, Post Mortem and Anti Mortem.
- Time, Function and Alterity in healthcare Architecture.
- Complexity and Contradiction in healthcare Architecture
- Healthcare Architectural Theory and Practice in International and Indian context.
- Healthcare Architectural development in International and Indian context: 21st century changes with digital india.
- Ethics of healthcare Architecture – Objectivism

READINGS:

- Complexity and Contradiction in Architecture by Robert Venturi
- Primary care centres, A guide to health care design by Geoffrey Purves
- Architectural Philosophy: Repetition, Function, Alterity by Andrew E. Benjamin

HCA -102: REASEARCH METHODOLOGY

TEACHING HOURS

L	T/ST	TOTAL
2	2	4

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
40	60	-	100	4

OBJECTIVE:

To enhance the students' generic research, communication skills and critical analytical ability complemented by specialized subject-specific research which shall provide foundation for post graduate program.

METHODOLOGY:

Lectures, Seminars, Workshops, Project work and tutorials.

CONTENTS:

Unit I: An introduction to Research Methodology- hypotheses, Null Hypothesis, Types of Research Foundation: Its Nature and Scope, plagiarism. Scientific Research, Action Research, Pure and Applied Researches in Architecture.

Unit II: Research Methods: Historical, Survey, Experimental, Case Study, Ethnographic, Visual Research, Research instruments used in the quantitative and qualitative modes of data collection.

Unit III: Data Collection strategies/ techniques and ethical considerations. Tools and Techniques of Research: Characteristics of Good Tools, Questionnaire and Interview, Observation ,Tests, Scale and Types

Unit IV: Descriptive Statistics: Data: Nature and types, Normal Probability Curve: Skewness and Kurtosis Measures of Central tendencies, Measure of Variability, Measures of Correlation: Pearson's correlation and Spearman's Rho

Unit V: Preparation of Research Proposal, Objectives, Research Questions, Hypothesis, Review of Related Literature, Analysis of Research paper, Dissertation and Thesis writing techniques in Architecture.

Expected Outcome:

A 2000-1500 words researched article on various theories and design philosophies on healthcare design, after reading 10-15 research papers. The write-up should have proper in text citations and referencing.

HCA -103: HEALTHCARE PLANNING-I

TEACHING HOURS

L	T/ST	TOTAL
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2	2	4
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EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
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40	60	-	100	4
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OBJECTIVE:

- To make a base of sound understanding of hospital departments/ primary healthcare centres/ small clinical facilities.
- To critically analyze the planning fundamentals and design dynamics of hospital departments and small clinics.

METHODOLOGY:

- Lectures and Site visits/educational trips for field observations, surveys and library studies.

CONTENTS

Public health and its program development

- Different programs of public health.
- Essential services for public health systems
- Emerging scope of public health components.
- Documentation & presentation of public health facility scenario in different regions of India.

PHC's and Hospital Departments

- Hierarchy of healthcare facilities as sub centres, PHC, CHC
- Introduction to hospital departments
- Planning & designing layouts
- Healthcare equipments/Machines in small healthcare facilities

OUTPUT:

- The output should be presented at the end of the semester in the form a detailed architectural review report of primary healthcare centre from various region of India.

HCA -104: RESILIENT HOSPITAL ARCHITECTURE

TEACHING HOURS

L	T/ST	TOTAL
2	1	3

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
20	30	-	50	2

OBJECTIVE:

- To be able to understand fundamentals of Hospital safety and risk management.
- To be able to understand fundamentals of resilient Architecture and its implementation.

METHODOLOGY:

- This is a research exercise where student will choose a topic and will study its various aspects as per the scope of the research.
- The discussions with the supervisor and site visits as required.

CONTENT:

- Safety issues of hospitals
- Risk assessment
- Resilience theory
- National and international resilience techniques
- Hospital safety standards
- Patient safety
- QRT
- Resilient Architecture elements
- Adaptive resilient features

OUTPUT:

- Report to be submitted at the end of the semester comprising the Study and conclusions/proposals/guidelines based on the reconnaissance.

READINGS:

- Disaster Management: Enabling Resilience by Anthony masys
- Building A Resilient Tomorrow: How To Prepare For The Coming Climate Disruption by Hill, Oxford UP

HCA -105: HOSPITAL SERVICES

TEACHING HOURS

L	T/ST	TOTAL
2	2	4

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
40	60	-	100	4

OBJECTIVE:

- To introduce the students with the theory and practice of latest hospital services (Clinical & non Clinical) and their impact on planning and design of healthcare Architecture.

METHODOLOGY:

- Classroom teaching through lectures and presentation.
- Conducting exercises on live studies, Visiting Hospitals and documentation of commercial Integrated Services.

CONTENTS:

- HVAC Services: Basics of air conditioning, air condition working, HVAC Comfort principles, HVAC Components and systems.
- Electrical Services: In coming supply and distribution in buildings, Electric safety and risk assessment, Concept of fault level, Over current protection
- Fire Services: Basic fire extinguishing systems viz Water based, pedestal fire hydrant systems, total flood gas protection systems, smoke management systems etc.
- Lighting Services: Photometry and colorimetry, lighting equipment and systems, lighting calculations, day lighting.
- Building Acoustics: Acoustics fundamentals, Acoustics design and planning, vibration
- Basic principles involved in design of Plumbing services, Solar water Heating, Rainwater harvesting etc.
- Medico engineering: Services like laundry, CSSD, Medical Gases, Autoclaving, Incinerator, ETP
- Electronic services : Networking, EAPBX, CCTV, Access control

HCA -106: STUDIO PROJECT- I (ACCREDITATION BASED)

TEACHING HOURS

L	T/ST	TOTAL
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1	5	6
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EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
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90	-	60	150	6
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OBJECTIVE:

- Exploring and designing of small scale health-care facilities (Sub centres, Primary healthcare centres, community healthcare centres).

METHODOLOGY:

- Studio Exercise.
- Documentation & presentation of health facility scenario.
- Case studies to be clubbed with library research.
- Conceptual design scheme

CONTENTS

The studio exercise should focus the study and designing of health-care facilities of small scale starting from sub-centers, Primary healthcare centers and community healthcare centers upto a small hospital. The project may include 30-50 beds general hospitals.

OUTPUT:

- The output should be a well designed 30-50 bed general hospital with complete set of drawings.

HCA-201: HEALTHCARE POLICIES, LEGISLATION AND ADMINISTRATION

TEACHING HOURS

L	T/ST	TOTAL
2	0	2

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
20	30	-	50	2

OBJECTIVE:

- To develop an understanding of policies & legislation related to healthcare sector.

METHODOLOGY:

- Lectures and presentations based on field observations, surveys, web search and library studies.

CONTENTS:

- Health law and policies
- Health Policies at various levels i.e. village, district, state and national level.
- Health care indicators
- Study of requirement for establishment of various hospitals and medical colleges.
- National & International Guidelines & Standards for General Hospital & Medical College: Is Codes, BIS, IPHS, WHO, UNICEF, Joint Commission, MCI, etc.
- Quality and accreditation based bodies: ISQUA- International Society for Quality in Healthcare, NABH- National Accreditation Boards of Hospitals & Healthcare
- Bio- medical waste management and handling rules
- CPCB (Central Pollution Control Board) guidelines
- Safe disposal of radio-active waste Rules 1995, guidelines of BARC.
- Role of Hospital in Environmental pollution and Environmental impact assessment

Hospital Administration

- Operation management
- Business plan
- Clinical and non clinical management
- Application of Principles of Hospital Administration to Hospital and Healthcare Buildings (It will include all patient facilitation services)
- Financial Management Unit
- Hospital Information System
- Medical Records
- Nursing Services Administration Unit
- Human Resource Development

HCA -202: HOSPITAL ENERGY SIMULATION & BIM

TEACHING HOURS

L	T/ST	TOTAL
0	2	2

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
30	-	20	50	2

OBJECTIVE:

To inform the students about the importance of energy efficiency and its conservation in healthcare structures.

To learn the basic techniques and processes involved in Energy Efficiency and Energy Conservation through various techniques. The study and application of various software involved in the process.

METHODOLOGY:

The methodology of imparting information should be lectures and presentations citing examples and case studies.

CONTENTS:

- **Introduction**
- LEED
- Benefits and Advantages
- Incentive Programs
- Certification
- Professional Accreditation

Green Building Concept

- Indian Green Building Council o Concepts of Green Building
- Case Study of Green Buildings
- Energy and Resource saving through Green Buildings
- Role of TERI

Energy Conservation Building code ECBC

- Role of Bureau of Energy Efficiency BEE in controlling Energy Scenario in India
- Application of ECBC in Indian Buildings
- Analysis of saving of Energy by the application of ECBC

Application of Softwares

- Introduction of Important Softwares in Energy Modelling of Buildings
- Application of Visual DOE in Modelling any one building

OUTPUT:

- The output will be a portfolio which includes application of BIM and Energy simulation on final studio exercise.

HCA -203: HEALTHCARE PLANNING-II

TEACHING HOURS

L	T/ST	TOTAL
2	2	4

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
40	60		100	4

OBJECTIVE:

- To develop basic understanding of clinical systems and departments of health-care facilities of secondary and tertiary care.

METHODOLOGY:

- Lectures introducing various concepts of health-care facilities.

CONTENTS

- Master Planning and Planning for Phasing of Physical Facility
- Universal Design for different types of Hospitals and Healthcare Buildings
- Modular Design of Healthcare Facilities
- Intensive Care Units of various types
- Intermediate Care Units of various types
- Emergency & Critical Care Facilities
- Trauma Care Facilities
- Outpatient Facilities
- Obstetric Suite, LDR & LDRP Rooms
- Imaging Suite including MRI, Ultrasound, Diagnostic
- Hospital Laboratories
- Blood Bank Services
- Interiors for Healthcare and Hospital Buildings
- Standard and Special Finishes for Healthcare Delivery Areas

HCA -204: DISSERTATION

TEACHING HOURS

L	T/ST	TOTAL
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4	0	4
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EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
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60		40	100	4
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OBJECTIVE:

- To be able to understand hospital departments and hospital systems individually with latest concepts and their incorporation through innovation in the Medical architecture.

METHODOLOGY:

- This is a research exercise where student will choose a hospital department and will study its various aspects as per the scope of the research.
- The discussions with the supervisor and site visits as required.

CONTENT:

Hospital Departments

- Resilient and sustainable hospital architecture
- Hospital clinical and Non Clinical departments
- Hospital ancillary services departments
- Hospital Auxiliary services
- Hospital support services departments
- Healthcare indicators.
- Indian healthcare facilities versus world healthcare facilities.
- Health problems of developing Nations.

Hospital Systems

- Safety and risk management
- Hospital Signage systems
- Hospital Traffic flow systems
- Hospital Equipments
- Hospital Landscape
- Hospital infections
- Hospital waste management

OUTPUT:

- The Dissertation report to be submitted at the end of the semester comprising the Study and conclusions/proposals/guidelines based on the study.

HCA-205: HOSPITAL SERVICES-II

TEACHING HOURS

L	T/ST	TOTAL
2	2	4

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
40	60		100	4

OBJECTIVE:

- To develop basic understanding of Nursing in health-care facilities and incorporation of spaces in design

METHODOLOGY:

- Lectures introducing various concepts of Nursing in health-care facilities.

CONTENTS

Planning and designing of Nursing Services

- General Nursing Unit
- Obstetrical Nursing unit
- Isolation Rooms
- Newborn Nurseries
- Cardiac Catheterization therapy
- Transfusion Chambers
- Dialysis Unit
- Pediatrics Nursing unit
- Psychiatric Nursing unit
- Intensive Care Unit (ICUs)
- Pulmonary medicine
- Chemotherapy Wards- Day care
- High Dependency Units

Planning and designing of Public Areas & Staff Facilities

- Entrance and lobby area
- Main Waiting Area
- Staff Facilities
- Meditation Room
- Coffee shop/ Gift shop etc.

Programming and Designing of Maintenance Services for Hospital Building

- Landscaping Maintenance Services
- Waste Management Services
- Housekeeping Services
- Building Maintenance Services and Hospital Design

HCA -206: STUDIO PROJECT -II (SYSTEM INTEGRATION)

TEACHING HOURS

L	T/ST	TOTAL
1	5	6

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
90	-	60	150	6

OBJECTIVE:

- Exploring and designing of specialised hospital which may be medium and large scale health-care facilities.

METHODOLOGY:

- Studio Exercise.
- Case studies & Documentation of health care facility.
- Conceptual design scheme

CONTENTS

The studio exercise should focus on the designing of specialized health-care facilities of medium and large scale. The scale may vary from 100-500 beds. These may include general hospital, specialized hospitals as cardiac hospital, Oncology, pediatrics, maternity hospital etc.

OUTPUT:

- The output should be a well designed 100-500 bed general hospital or specialised hospital with complete set of drawings and Model.

HCA-301: Safety & Risk Management

TEACHING HOURS

L	T/ST	TOTAL
2	0	2

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
20	30		50	2

OBJECTIVE:

- To make a base of sound understanding of the financial aspect of healthcare institutions.

METHODOLOGY:

- Lectures and presentations based on field observations, surveys, web search and library studies.

CONTENTS:

- Hospital disasters and hazards
- Philosophy of patient, staff, attendant, infrastructure and environment safety.
- Equipment and utility safety
- Laws, rules, regulations and institutional bodies on safety in hospitals.
- Risk management- Evacuation and drills etc.
- Risk management v/s Layout plan
- Emergency preparedness
- Risk assessment and audits
- Fire and life safety
- Infection prevention and control
- Crowd management
- Hospital building services management

OUTPUT:

- The output should be presented at the end of the semester in the form of a safety and risk statement with all revenue and expenditure heads of safety and risk management

HCA-302: GLOBAL TRENDS, OPPORTUNITIES AND STRATEGY IN HEALTH CARE

TEACHING HOURS

L	T/ST	TOTAL
2	0	2

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
20	30		50	2

OBJECTIVE:

- To identify global healthcare services and their potential and opportunities with respect to Indian scenario.
- To analyse mechanism to connect healthcare facilities with global market

METHODOLOGY:

- Lectures and presentations based on field studies and secondary sources.

CONTENTS:

- New medical practices and their facilities around the world.
- Dynamics of global healthcare services
- Traditional medicine systems of world with specific focus on Indian traditional systems
- Patients behaviour and trends towards regional medicine systems
- Famous Destinations around the globe which are famous for meditations and their importance .
- National and international Business Modules of healthcare delivery.
- Medical tourism and emerging medical techniques e.g Botox and hairtransplant.

HCA-303: HEALTHCARE PLANNING-III

TEACHING HOURS

L	T/ST	TOTAL
2	2	4

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
40	60		100	4

OBJECTIVE:

- To equip students with complexities in design of health care.
- To understand the need for creation of healthy built environment.
- To equip students with modernization and expansion in hospitals.

METHODOLOGY:

- Lectures & tutorial exercises.

CONTENTS

- Art in health, Healing environment:
- Health care planning: preparation of Vision, Mission & Services
- System adaptability : Moving from old system to contemporary systems,
- Adaptive reuse, regeneration, Flexibility, adaptability & Expansion in hospitals.
- Planning, design, contract documents, construction & operation of healthcare facilities.
- Norms & policies: Health policies & Allied norms
- Concepts in health infra structure. Social and physical infrastructure
- Qualitative and quantities techniques of assessing requirements, planning amenities and institutions.
- Public and private sector role in resource mobilization. Instruments of resource mobilization.
- Quality control mechanisms, institutions.
- Concepts of decentralization of development and management.
- Concept and scope of outsourcing in healthcare.
- Programming of Engineering Services for Hospital Building as electrical, ETP, STP, HVAC etc
- Programming and Designing of Centralized Services for Hospital Building as Medical record, Parking, Laundry, catering etc.

HCA-304: HOSPITAL INTERIOR DESIGN

TEACHING HOURS

L	T/ST	TOTAL
1	1	2

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
30	-	20	50	2

OBJECTIVE:

- The objective shall be to comprehend, document, analyze, critique the complexities of healthcare structures their sensitivity and its departmental relationships. And develop design abilities of students to cater contemporary challenges.

METHODOLOGY:

- Studio Exercise.
- Documentation & presentation of interior design of Existing health care facilities.
- Conceptual design scheme

CONTENTS

- Healing environments and interior design
- Basic elements of interior design
- Basics of Furniture Design
- digital facade, Intelligent and smart façade of hospital
- Interior automation
- Basics of Interior Services
- Evaluation of Mini Project
- Lighting and Acoustics in Interiors
- Advanced Interior Services
- Hospital signage
- Advanced Materials and Methods of Construction
- Renovation and Alteration

OUTPUT:

- The output will be an interior portfolio which includes detailing of an area from the studio exercise, incorporating all the interior design details with detailed estimate.

HCA-305: HOSPITAL SERVICES - III

TEACHING HOURS

L	T/ST	TOTAL
2	2	4

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
40	60		100	4

OBJECTIVE:

To work on any specialized services in a hospital

METHODOLOGY:

The methodology of imparting information should be lectures and presentations citing examples and case studies.

CONTENTS:

Building services – Advanced Tertiary care hospital services

1. Electrical services
2. Fire services
3. Lighting services
4. Architectural Building Acoustics
5. Intelligent Building Services
6. Automation and smart building services

HCA-306: STUDIO PROJECT -III (SUPER SPECIALTY)

TEACHING HOURS			EXAMINATION MARKS				
L	T/ST	TOTAL	IA	WR	VV	TOTAL	CREDIT
1	5	6	90		60	150	6

OBJECTIVE:

- Exploring and designing of large scale and most complex health-care facilities.

METHODOLOGY:

- Studio Exercise.
- Case studies to be clubbed with library research & live surveys.
- Detailed design scheme

CONTENTS

The studio exercise should focus on the designing of specialized and most complex health-care facilities of large scale. The scale may vary from 1000-2500 beds. These may include medi city, medical colleges, dental colleges, nursing colleges, large general hospital, covid centers of large capacities, and specialized hospitals as cardiac hospital, Oncology, pediatrics, maternity hospital etc.

OUTPUT:

- The output should be a well designed 1000-2500 bed general hospital or specialised hospital with complete set of drawings and Model.

HCA-401: PROJECT MANAGEMENT

TEACHING HOURS

L	T/ST	TOTAL
2	0	2

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
20	30	-	50	2

OBJECTIVE:

- To study the management aspects related to the Thesis topic and formulate a management framework or proposals.

METHODOLOGY:

- Lectures and Presentations.
- Case Studies (primary & secondary)

CONTENTS:

- Hospital Project life cycle - processes from inception to post construction.
- Hospital CPM & PERT analysis
- Applications of cost benefit analysis, Feasibility Report, value engineering etc.
- Hospital Project Planning and Project Monitoring and control
- Application of project management processes (i.e., communication and integration, scope, time, cost, health, safety and environment, risk management, human resource management etc.)
- Project Procurement and Management
- Study of procurement guidelines of international institutions such as FIDIC, WORLD BANK, ADB etc.
- Project Management - Organisation, Roles and Responsibility

HCA-402: THESIS

TEACHING HOURS

L	T/ST	TOTAL
2	10	12

EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
180		120	300	12

OBJECTIVE:

- Thesis projects must reflect the culmination of the development of the students architectural design skills. The project must be chosen out of 500 bedded/specialised hospital so as to address, through design, covering all aspects of the design process.

METHODOLOGY:

- The student must submit to the department the synopsis of at least two design/research projects for approval, out of which one would be selected depending upon its merit for the scope of design intervention and its scale.
- A guide to supervise will be appointed by the head for each student. Regular progress will be monitored in stages.

CONTENTS

The Medical architecture thesis is the culmination of four semesters of theory and design inputs course.

The product must consist of well formatted professionally produced report in the case of a research thesis, and a set of drawings, models etc. to demonstrate the issue based design thesis. A report would be necessary in this case as well.

The thesis is more than a terminal project and must have a point to prove. It must make original contribution through generic principles, replicable in other health facility design situations. A thesis must address contemporary issues/challenges/systems of healthcare facilities with latest concepts and their incorporation through innovation in the Medical architecture.

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HCA-403: INNOVATIONS & ADAPTIBILITY IN HEALTHCARE

TEACHING HOURS

L	T/ST	TOTAL
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2	0	2
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EXAMINATION MARKS

IA	WR	VV	TOTAL	CREDIT
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30		20	50	2
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OBJECTIVE:

- To be able to understand latest innovation concepts and their incorporation through innovation in the Medical architecture.

METHODOLOGY:

- This is a to foster innovation through exercise where student will choose a topic and will study its various aspects as per the scope of the research.
- The innovation exercise may be clubbed with the thesis.

CONTENTS

The topics may include

- Models of innovations
- Design innovations
- Role of Artificial Intelligence
- Robotics in Hospital
- Covid -19 design strategies
- Building Innovations
- Material innovations
- Medical science innovations
- Case study of latest innovation in healthcare Architecture.

OUTPUT:

- The report to be submitted at the end of the semester comprising the Study and conclusions/proposals/guidelines based on the reconnaissance.