

DENTAL SCIENCES • SPECIALIST TRAINING



NTHRYS

OPC PVT LTD

DENTAL SCIENCES • FELLOWSHIP TRAINING PROGRAMS

Dental Materials

A complete materials-science architecture for restorative dentists, prosthodontists and dental technologists — spanning fundamentals, properties, biocompatibility and testing, impression and model materials, direct restoratives and adhesives, cements, metals and ceramics, polymers, endodontic, implant, periodontal and orthodontic materials, and digital, additive, nano and regenerative biomaterials. Every protocol is delivered through structured laboratory handling, characterisation and testing.

33

SUB-STREAMS

138

PROTOCOLS

961

HOURS

2026

EDITION

Sub-Streams at a Glance

This catalogue lists every Dental Materials training protocol delivered at the NTHRYS Dental Sciences centre, organised under the **DM** department across 33 specialist sub-streams. Each protocol carries a unique code, a defined duration and a per-protocol fee, and may be combined into custom fellowship tracks. Protocols are pitched at practising specialists, postgraduates and digital-laboratory technologists.

STREAM	SUB-STREAM	FOCUS	N	HRS	VALUE
NDS-DM-SC	Material Science Fundamentals	Structure and classification	4	24	₹ 46,000
NDS-DM-PP	Physical & Mechanical Properties	Property fundamentals	5	32	₹ 64,000
NDS-DM-BC	Biocompatibility & Biological Properties	Host-material interaction	4	27	₹ 59,000
NDS-DM-TM	Testing, Characterisation & Standards	Property testing and QC	4	29	₹ 61,000
NDS-DM-IM	Impression Materials	Elastomeric and hydrocolloid	4	26	₹ 47,000
NDS-DM-GY	Gypsum & Model Materials	Plaster, stone and die materials	4	23	₹ 36,500
NDS-DM-WX	Dental Waxes	Pattern and processing waxes	4	24	₹ 38,000
NDS-DM-IN	Investment & Casting Materials	Lost-wax casting science	4	28	₹ 50,500
NDS-DM-AM	Dental Amalgam	Alloy and amalgamation	4	26	₹ 50,000
NDS-DM-RC	Resin Composites	Filler-matrix systems and curing	5	35	₹ 73,000
NDS-DM-AD	Adhesive & Bonding Systems	Bonding chemistry and testing	5	34	₹ 70,500
NDS-DM-GI	Glass-Ionomer & Resin-Modified	Acid-base and RMGIC science	4	26	₹ 50,000
NDS-DM-BA	Bioactive & Remineralising Materials	Ion-releasing material science	4	27	₹ 54,000
NDS-DM-CM	Dental Cements & Luting Agents	Luting and base cements	4	26	₹ 47,000
NDS-DM-LB	Liners, Bases & Pulp-Capping Materials	Pulp-protection materials	4	25	₹ 45,500
NDS-DM-MA	Dental Metals & Casting Alloys	Casting-alloy metallurgy	4	28	₹ 61,500
NDS-DM-WM	Wrought Metals & Orthodontic Alloys	Wire metallurgy	4	28	₹ 56,000

Sub-Streams at a Glance *continued*

STREAM	SUB-STREAM	FOCUS	N	HRS	VALUE
NDS-DM-CR	Dental Ceramics & Porcelain	Layering and glass ceramics	5	36	₹ 83,000
NDS-DM-ZR	Zirconia & High-Strength Ceramics	Polycrystalline-ceramic science	5	38	₹ 91,000
NDS-DM-SO	Soldering, Brazing & Welding	Metal-joining science	4	27	₹ 54,000
NDS-DM-AC	Acrylic & Denture-Base Polymers	PMMA processing science	4	27	₹ 51,500
NDS-DM-PM	Maxillofacial & Soft-Liner Polymers	Silicone and resilient materials	4	26	₹ 52,000
NDS-DM-HP	High-Performance Polymers (PEEK)	Advanced polymer science	4	29	₹ 63,500
NDS-DM-EN	Endodontic Materials	Sealers, core and repair materials	5	33	₹ 66,000
NDS-DM-IP	Implant Materials & Surfaces	Titanium and surface engineering	4	30	₹ 72,000
NDS-DM-PS	Periodontal & Bone-Graft Materials	Graft and membrane materials	4	27	₹ 56,000
NDS-DM-OR	Orthodontic Materials & Adhesives	Bracket, adhesive and aligner materials	4	27	₹ 54,000
NDS-DM-FN	Finishing, Polishing & Abrasives	Surface-finishing science	4	25	₹ 45,500
NDS-DM-CC	CAD-CAM & Machinable Materials	Millable material science	4	31	₹ 1,12,000
NDS-DM-AP	Additive (3D-Printing) Materials	Printed-material science	4	33	₹ 1,32,000
NDS-DM-NM	Nanomaterials & Surface Engineering	Nanoscale material science	4	34	₹ 1,43,000
NDS-DM-RB	Regenerative & Tissue-Engineering Biomaterials	Scaffold and smart materials	4	35	₹ 1,47,500
NDS-DM-AI	AI & Computational Materials Science	Materials informatics	4	35	₹ 1,53,500
Full department — 33 sub-streams			138	961	₹ 22,86,000

How the Programme is Built

Fees are tiered by clinical and technological complexity — from advanced core restorative protocols through implant, maxillofacial, digital, robotic and bioengineered streams. Per-protocol fees range from ₹ 8,000 to ₹ 39,500, with the complete department representing ₹ 22,86,000 of specialist training across 961 hours.

HOW TO READ A CODE

NDS – DM – SC – 01

NDS

Nthys Dental Sciences

DM

Dental Materials dept

SC

Sub-stream

01

Protocol number

Every protocol is delivered hands-on on live clinical and digital-laboratory equipment, with structured assessment and case documentation. Sub-streams may be enrolled individually or bundled into themed fellowship pathways (e.g. *Full-Arch Implant, Digital & Robotic, Maxillofacial Rehabilitation*).

Material Science Fundamentals

Structure and classification

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-SC-01	Atomic & Molecular Structure	Bonding and material classes.	6 hrs	₹ 11,500
NDS-DM-SC-02	Structure of Materials	Crystalline and amorphous structure.	6 hrs	₹ 11,500
NDS-DM-SC-03	Material Classification	Metals, ceramics, polymers, composites.	6 hrs	₹ 11,500
NDS-DM-SC-04	Material-Selection Principles	Property-based selection.	6 hrs	₹ 11,500

Physical & Mechanical Properties

Property fundamentals

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-PP-01	Mechanical Properties	Strength, hardness and elasticity.	7 hrs	₹ 14,000
NDS-DM-PP-02	Stress-Strain & Fatigue	Load-response behaviour.	7 hrs	₹ 14,000
NDS-DM-PP-03	Thermal & Electrical Properties	Conductivity and expansion.	6 hrs	₹ 12,000
NDS-DM-PP-04	Optical & Surface Properties	Colour, wetting and adhesion.	6 hrs	₹ 12,000
NDS-DM-PP-05	Rheology & Viscoelasticity	Flow and time-dependent behaviour.	6 hrs	₹ 12,000

Biocompatibility & Biological Properties

Host-material interaction

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-BC-01	Biocompatibility Principles	Host-material interaction.	7 hrs	₹ 15,500
NDS-DM-BC-02	Cytotoxicity Testing	In-vitro biocompatibility assays.	8 hrs	₹ 17,500
NDS-DM-BC-03	Allergy & Adverse Reactions	Material-related reactions.	6 hrs	₹ 13,000
NDS-DM-BC-04	Regulatory Biological Standards	ISO biocompatibility standards.	6 hrs	₹ 13,000

Testing, Characterisation & Standards

Property testing and QC

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-TM-01	Mechanical-Property Testing	Tensile, compressive and flexural tests.	8 hrs	₹ 17,000
NDS-DM-TM-02	Hardness & Wear Testing	Surface-property evaluation.	7 hrs	₹ 14,500
NDS-DM-TM-03	Material Characterisation (SEM/XRD)	Structural-analysis methods.	8 hrs	₹ 17,000
NDS-DM-TM-04	Standards & Quality Control	ISO/ADA specification testing.	6 hrs	₹ 12,500

Impression Materials

Elastomeric and hydrocolloid

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-IM-01	Elastomeric Impression Materials	PVS and polyether handling.	7 hrs	₹ 12,500
NDS-DM-IM-02	Hydrocolloid Impression Materials	Alginate and agar handling.	6 hrs	₹ 11,000
NDS-DM-IM-03	Impression Technique & Accuracy	Dimensional-stability factors.	7 hrs	₹ 12,500
NDS-DM-IM-04	Digital vs Conventional Impressions	Material-method comparison.	6 hrs	₹ 11,000

Gypsum & Model Materials

Plaster, stone and die materials

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-GY-01	Gypsum Products & Types	Plaster, stone and die-stone.	6 hrs	₹ 9,500
NDS-DM-GY-02	Mixing & Setting Reactions	Setting-property control.	6 hrs	₹ 9,500
NDS-DM-GY-03	Model & Die Fabrication	Cast-pouring technique.	6 hrs	₹ 9,500
NDS-DM-GY-04	Gypsum Property Optimisation	Strength and accuracy.	5 hrs	₹ 8,000

Dental Waxes

Pattern and processing waxes

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-WX-01	Dental Wax Types & Properties	Pattern, processing and impression waxes.	6 hrs	₹ 9,500
NDS-DM-WX-02	Inlay & Pattern Wax Handling	Wax-pattern fabrication.	7 hrs	₹ 11,000
NDS-DM-WX-03	Wax Distortion & Control	Dimensional-stability management.	6 hrs	₹ 9,500
NDS-DM-WX-04	Boxing & Utility Waxes	Auxiliary-wax application.	5 hrs	₹ 8,000

Investment & Casting Materials

Lost-wax casting science

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-IN-01	Investment Materials & Types	Gypsum, phosphate and silica investments.	7 hrs	₹ 12,500
NDS-DM-IN-02	Casting Procedure & Technique	Lost-wax casting.	8 hrs	₹ 14,500
NDS-DM-IN-03	Casting Defects & Troubleshooting	Defect identification.	7 hrs	₹ 12,500
NDS-DM-IN-04	Investment-Expansion Control	Compensation-expansion management.	6 hrs	₹ 11,000

Dental Amalgam

Alloy and amalgamation

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-AM-01	Amalgam Composition & Setting	Alloy and amalgamation reaction.	7 hrs	₹ 13,500
NDS-DM-AM-02	Amalgam Manipulation	Trituration and condensation.	7 hrs	₹ 13,500
NDS-DM-AM-03	Amalgam Properties & Failures	Creep, corrosion and fracture.	6 hrs	₹ 11,500
NDS-DM-AM-04	Mercury Hygiene & Safety	Handling and disposal.	6 hrs	₹ 11,500

Resin Composites

Filler-matrix systems and curing

5
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-RC-01	Composite Composition & Classification	Filler and matrix systems.	7 hrs	₹ 14,500
NDS-DM-RC-02	Polymerisation & Shrinkage	Curing and stress control.	8 hrs	₹ 17,000
NDS-DM-RC-03	Bulk-Fill & Flowable Composites	Modern-composite handling.	7 hrs	₹ 14,500
NDS-DM-RC-04	Composite Properties & Wear	Mechanical and esthetic behaviour.	7 hrs	₹ 14,500
NDS-DM-RC-05	Light-Curing Technology	Curing-unit science.	6 hrs	₹ 12,500

Adhesive & Bonding Systems

Bonding chemistry and testing

5
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-AD-01	Adhesion Principles	Bonding-mechanism science.	7 hrs	₹ 14,500
NDS-DM-AD-02	Etch-and-Rinse Adhesives	Total-etch system handling.	7 hrs	₹ 14,500
NDS-DM-AD-03	Self-Etch & Universal Adhesives	Modern-adhesive handling.	7 hrs	₹ 14,500
NDS-DM-AD-04	Bond-Strength Testing	Adhesion-evaluation methods.	7 hrs	₹ 14,500
NDS-DM-AD-05	Adhesive Durability	Hybrid-layer longevity.	6 hrs	₹ 12,500

Glass-Ionomer & Resin-Modified

Acid-base and RMGIC science

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-GI-01	Glass-Ionomer Composition & Setting	Acid-base reaction science.	7 hrs	₹ 13,500
NDS-DM-GI-02	Resin-Modified GIC	RMGIC handling.	7 hrs	₹ 13,500
NDS-DM-GI-03	GIC Properties & Fluoride Release	Material-behaviour analysis.	6 hrs	₹ 11,500
NDS-DM-GI-04	GIC Clinical Applications	Indication-based use.	6 hrs	₹ 11,500

Bioactive & Remineralising Materials

Ion-releasing material science

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-BA-01	Bioactive Material Science	Ion-releasing material chemistry.	7 hrs	₹ 14,000
NDS-DM-BA-02	Calcium-Silicate Materials	MTA and Biodentine science.	7 hrs	₹ 14,000
NDS-DM-BA-03	Remineralising Systems	CPP-ACP and bioactive glass.	7 hrs	₹ 14,000
NDS-DM-BA-04	Giomer & Alkasite Materials	Next-generation bioactives.	6 hrs	₹ 12,000

Dental Cements & Luting Agents

Luting and base cements

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-CM-01	Dental Cement Classification	Luting, base and restorative cements.	7 hrs	₹ 12,500
NDS-DM-CM-02	Zinc-Phosphate & Polycarboxylate	Traditional-cement handling.	6 hrs	₹ 11,000
NDS-DM-CM-03	Resin & Self-Adhesive Cements	Modern-luting science.	7 hrs	₹ 12,500
NDS-DM-CM-04	Cement Selection & Manipulation	Indication-based use.	6 hrs	₹ 11,000

Liners, Bases & Pulp-Capping Materials

Pulp-protection materials

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-LB-01	Liners & Cavity Varnishes	Pulp-protection materials.	6 hrs	₹ 11,000
NDS-DM-LB-02	Cavity Bases	Thermal and mechanical base materials.	6 hrs	₹ 11,000
NDS-DM-LB-03	Pulp-Capping Materials	Calcium-hydroxide and silicate.	7 hrs	₹ 12,500
NDS-DM-LB-04	Pulp-Protection Strategy	Material-selection protocols.	6 hrs	₹ 11,000

Dental Metals & Casting Alloys

Casting-alloy metallurgy

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-MA-01	Dental Casting Alloys	Noble and base-metal alloys.	8 hrs	₹ 17,500
NDS-DM-MA-02	Alloy Composition & Phases	Metallurgy fundamentals.	7 hrs	₹ 15,500
NDS-DM-MA-03	Mechanical & Corrosion Behaviour	Alloy-property evaluation.	7 hrs	₹ 15,500
NDS-DM-MA-04	Alloy Selection for Prosthetics	Application-based choice.	6 hrs	₹ 13,000

Wrought Metals & Orthodontic Alloys

Wire metallurgy

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-WM-01	Wrought-Metal Properties	Cold-worked-metal behaviour.	7 hrs	₹ 14,000
NDS-DM-WM-02	Stainless-Steel & Co-Cr Wires	Orthodontic-wire metallurgy.	7 hrs	₹ 14,000
NDS-DM-WM-03	NiTi & Beta-Titanium Alloys	Shape-memory wire science.	8 hrs	₹ 16,000
NDS-DM-WM-04	Wire Mechanical Testing	Property-characterisation.	6 hrs	₹ 12,000

Dental Ceramics & Porcelain

Layering and glass ceramics

5
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-CR-01	Dental Ceramic Classification	Glass, crystalline and hybrid ceramics.	7 hrs	₹ 16,000
NDS-DM-CR-02	Feldspathic & Leucite Ceramics	Layering-ceramic science.	8 hrs	₹ 18,500
NDS-DM-CR-03	Lithium-Disilicate Materials	Glass-ceramic handling.	8 hrs	₹ 18,500
NDS-DM-CR-04	Ceramic Processing & Firing	Furnace-technique science.	7 hrs	₹ 16,000
NDS-DM-CR-05	Ceramic Strengthening Mechanisms	Toughening principles.	6 hrs	₹ 14,000

Zirconia & High-Strength Ceramics

Polycrystalline-ceramic science

5
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-ZR-01	Zirconia Material Science	Polycrystalline-ceramic chemistry.	8 hrs	₹ 19,000
NDS-DM-ZR-02	Monolithic & Multilayer Zirconia	Translucency-grade selection.	8 hrs	₹ 19,000
NDS-DM-ZR-03	Zirconia Processing & Sintering	Furnace and milling science.	8 hrs	₹ 19,000
NDS-DM-ZR-04	Zirconia Bonding & Conditioning	Surface-treatment protocols.	7 hrs	₹ 17,000
NDS-DM-ZR-05	Ageing & Low-Temperature Degradation	Long-term-stability science.	7 hrs	₹ 17,000

Soldering, Brazing & Welding

Metal-joining science

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-SO-01	Soldering & Brazing	Joining-technique fundamentals.	7 hrs	₹ 14,000
NDS-DM-SO-02	Laser & Spot Welding	Modern-joining methods.	8 hrs	₹ 16,000
NDS-DM-SO-03	Flux & Joining Materials	Auxiliary-material science.	6 hrs	₹ 12,000
NDS-DM-SO-04	Joint Quality & Testing	Connection-strength evaluation.	6 hrs	₹ 12,000

Acrylic & Denture-Base Polymers

PMMA processing science

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-AC-01	Acrylic Resin Chemistry	PMMA polymerisation science.	7 hrs	₹ 13,500
NDS-DM-AC-02	Denture-Base Processing	Heat and auto-cure processing.	8 hrs	₹ 15,000
NDS-DM-AC-03	Acrylic Properties & Porosity	Material-defect control.	6 hrs	₹ 11,500
NDS-DM-AC-04	Repair & Reline Materials	Maintenance-material science.	6 hrs	₹ 11,500

SUB-STREAM • DM-PM

Maxillofacial & Soft-Liner Polymers

Silicone and resilient materials

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-PM-01	Maxillofacial Silicone Materials	Silicone-elastomer science.	7 hrs	₹ 14,000
NDS-DM-PM-02	Soft-Liner Materials	Resilient-liner handling.	7 hrs	₹ 14,000
NDS-DM-PM-03	Tissue-Conditioner Materials	Conditioning-material science.	6 hrs	₹ 12,000
NDS-DM-PM-04	Colour & Characterisation Materials	Pigment-system science.	6 hrs	₹ 12,000

High-Performance Polymers (PEEK)

Advanced polymer science

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-HP-01	High-Performance Polymer Science	PEEK and PEKK properties.	8 hrs	₹ 17,500
NDS-DM-HP-02	PEEK Processing & Fabrication	Milling and pressing science.	8 hrs	₹ 17,500
NDS-DM-HP-03	Polymer-Ceramic Hybrids (PICN)	Hybrid-material science.	7 hrs	₹ 15,500
NDS-DM-HP-04	Polymer Surface Treatment	Adhesion-optimisation.	6 hrs	₹ 13,000

Endodontic Materials

Sealers, core and repair materials

5
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-EN-01	Endodontic Sealer Materials	Sealer-chemistry science.	7 hrs	₹ 14,000
NDS-DM-EN-02	Gutta-Percha & Obturation Materials	Core-material science.	7 hrs	₹ 14,000
NDS-DM-EN-03	Bioceramic Endodontic Materials	Calcium-silicate science.	7 hrs	₹ 14,000
NDS-DM-EN-04	Intracanal Medicament Materials	Disinfectant-material science.	6 hrs	₹ 12,000
NDS-DM-EN-05	Root-Repair Materials	Perforation and retro materials.	6 hrs	₹ 12,000

Implant Materials & Surfaces

Titanium and surface engineering

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-IP-01	Implant Material Science	Titanium and alloy metallurgy.	8 hrs	₹ 19,000
NDS-DM-IP-02	Implant Surface Treatments	Surface-topography engineering.	8 hrs	₹ 19,000
NDS-DM-IP-03	Zirconia & Ceramic Implants	Metal-free implant science.	7 hrs	₹ 17,000
NDS-DM-IP-04	Osseointegration Material Factors	Surface-biology interaction.	7 hrs	₹ 17,000

Periodontal & Bone-Graft Materials

Graft and membrane materials

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-PS-01	Bone-Graft Material Science	Auto/allo/xeno/synthetic grafts.	7 hrs	₹ 14,500
NDS-DM-PS-02	Barrier-Membrane Materials	GTR and GBR membrane science.	7 hrs	₹ 14,500
NDS-DM-PS-03	Soft-Tissue Substitute Materials	Matrix-material science.	7 hrs	₹ 14,500
NDS-DM-PS-04	Biologic & Growth-Factor Materials	Regenerative-material science.	6 hrs	₹ 12,500

Orthodontic Materials & Adhesives

Bracket, adhesive and aligner materials

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-OR-01	Orthodontic Bracket Materials	Metal, ceramic and polymer brackets.	7 hrs	₹ 14,000
NDS-DM-OR-02	Orthodontic Adhesives & Bonding	Bonding-material science.	7 hrs	₹ 14,000
NDS-DM-OR-03	Aligner & Thermoplastic Materials	Aligner-polymer science.	7 hrs	₹ 14,000
NDS-DM-OR-04	Elastomeric & Auxiliary Materials	Module and chain material science.	6 hrs	₹ 12,000

Finishing, Polishing & Abrasives

Surface-finishing science

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-FN-01	Abrasives & Finishing Materials	Abrasive-science fundamentals.	6 hrs	₹ 11,000
NDS-DM-FN-02	Polishing Systems	Surface-finishing protocols.	6 hrs	₹ 11,000
NDS-DM-FN-03	Finishing of Restorative Materials	Material-specific finishing.	7 hrs	₹ 12,500
NDS-DM-FN-04	Surface-Roughness Evaluation	Finish-quality assessment.	6 hrs	₹ 11,000

CAD-CAM & Machinable Materials

Millable material science

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-CC-01	CAD-CAM Material Science	Machinable-material classification.	8 hrs	₹ 29,000
NDS-DM-CC-02	Machinable Ceramic Blocks	Milling-grade ceramics.	8 hrs	₹ 29,000
NDS-DM-CC-03	Hybrid & Resin-Ceramic Blocks	PICN and composite blocks.	8 hrs	₹ 29,000
NDS-DM-CC-04	Milling & Post-Processing	Material-finishing workflow.	7 hrs	₹ 25,000

Additive (3D-Printing) Materials

Printed-material science

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-AP-01	Additive-Manufacturing Materials	3D-printing-resin science.	8 hrs	₹ 32,000
NDS-DM-AP-02	Photopolymer & Resin Systems	SLA/DLP-resin chemistry.	8 hrs	₹ 32,000
NDS-DM-AP-03	Metal & Ceramic Printing Materials	SLM and printed-ceramic science.	9 hrs	₹ 36,000
NDS-DM-AP-04	Print-Material Validation	Property-verification protocols.	8 hrs	₹ 32,000

Nanomaterials & Surface Engineering

Nanoscale material science

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-NM-01	Nanomaterials in Dentistry	Nanoscale-material science.	9 hrs	₹ 38,000
NDS-DM-NM-02	Nanofillers & Nanocomposites	Property-enhancement science.	8 hrs	₹ 33,500
NDS-DM-NM-03	Antimicrobial Surface Engineering	Functional-coating science.	9 hrs	₹ 38,000
NDS-DM-NM-04	Nanomaterial Characterisation	Nanoscale-analysis methods.	8 hrs	₹ 33,500

SUB-STREAM · DM-RB

Regenerative & Tissue-Engineering Biomaterials

Scaffold and smart materials

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-RB-01	Tissue-Engineering Biomaterials	Scaffold-material science.	9 hrs	₹ 38,000
NDS-DM-RB-02	Bioprintable Materials	Bioink and construct science.	9 hrs	₹ 38,000
NDS-DM-RB-03	Smart & Responsive Materials	Stimulus-responsive science.	9 hrs	₹ 38,000
NDS-DM-RB-04	Regenerative Material Validation	Biologic-performance testing.	8 hrs	₹ 33,500

AI & Computational Materials Science

Materials informatics

4
PROTOCOLS

CODE	PROTOCOL	DESCRIPTION	DURATION	FEE (INR)
NDS-DM-AI-01	AI in Materials Discovery	Computational-material design.	9 hrs	₹ 39,500
NDS-DM-AI-02	Machine-Learning Property Prediction	Predictive-material modelling.	9 hrs	₹ 39,500
NDS-DM-AI-03	Materials Informatics	Data-driven-materials science.	9 hrs	₹ 39,500
NDS-DM-AI-04	AI Quality & Failure Analysis	Automated-defect detection.	8 hrs	₹ 35,000

ENROL • MASTER • LEAD

Fellowship-Grade Dental Materials Training

Every protocol in this catalogue is delivered as supervised hands-on training on working clinical and digital-laboratory equipment — spanning instrumentation, advanced technique, digital and robotic workflows, biomaterials and case documentation. Protocols combine into custom fellowship tracks tailored to individual specialists or institutional programmes.

- 33 specialist sub-streams
- 138 training protocols
- 961 total training hours
- ₹ 22,86,000 full-department value

NTHRYS OPC PVT LTD

DENTAL SCIENCES • DENTAL MATERIALS TRAINING CENTRE