



M.Sc. in Osteopathy (2 Years, 4 Semesters)

Overview

The M.Sc. in Osteopathy is a specialized postgraduate program designed to provide comprehensive training in the principles, techniques, and clinical applications of osteopathic medicine. This program integrates manual therapy, biomechanics, musculoskeletal rehabilitation, and holistic healthcare approaches to prepare graduates for careers in osteopathic practice, sports therapy, rehabilitation centers, and integrative medicine.

Osteopathy focuses on diagnosing, treating, and preventing musculoskeletal disorders through non-invasive, hands-on techniques that enhance the body's natural healing processes. The program covers areas such as osteopathic manipulation, clinical anatomy, pain management, and rehabilitation techniques, ensuring students gain both theoretical knowledge and extensive clinical experience.

Affiliated Institution: School of Medical Sciences and Technology, Malla Reddy Vishwavidyapeeth (Deemed to be University)

Eligibility: A pass in B.Sc. (Physiotherapy, Chiropractic, Life Sciences, Allied Health Sciences, or related fields) with at least 50% marks in the qualifying examination.

Key Highlights

- **Comprehensive Training in Osteopathic Medicine** – Covers manual therapy, biomechanics, and musculoskeletal rehabilitation.
- **Holistic & Patient-Centered Approach** – Integrating osteopathic principles with modern healthcare practices.
- **Clinical Exposure** – Practical training in hospitals, osteopathy clinics, and sports rehabilitation centers.
- **Advanced Therapeutic Techniques** – Training in spinal adjustments, cranial osteopathy, and visceral manipulation.
- **Research & Evidence-Based Practice** – Conducting studies on osteopathic techniques, pain management, and rehabilitation outcomes.



PROGRAM OUTCOMES (POs)

PO	Program Outcomes
PO-1	Understand the Principles of Osteopathic Medicine
PO-2	Analyze Musculoskeletal and Neuromuscular Systems
PO-3	Apply Osteopathic Techniques for Diagnosis and Treatment
PO-4	Manage Musculoskeletal Disorders and Chronic Pain
PO-5	Ensure Evidence-Based Practice and Research in Osteopathy
PO-6	Collaborate in Multidisciplinary Healthcare Teams
PO-7	Understand Ethical and Professional Responsibilities in Osteopathy
PO-8	Integrate Osteopathy with Preventive and Lifestyle Medicine



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COURSE STRUCTURE – M.Sc. Osteopathy

SEMESTER – I

Sl. No.	Broad Category	Course Code	Name of the Subject/Practical	Contact hours/week			Credits
				L	T	P	
1.	Major (Core)	MSO101	Advanced Principles of Osteopathy	2	1	0	3
2.		MSO102	Human Anatomy & Biomechanics for Osteopathy	2	1	0	3
3.		MSO103	Neuro-Musculoskeletal Disorders & Management	2	1	0	3
4.		MSO104	Osteopathic Assessment & Diagnosis	2	0	2	3
5.	Minor Select any two minor courses, each worth 3 credits, for a maximum of 6 credits per semester	MSO105	1. Sports & Rehabilitation Osteopathy	2	0	2	6
			2. Geriatric Osteopathy 3. Pediatric Osteopathy 4. Nutritional Aspects in Musculoskeletal Health 5. Psychosomatic Disorders & Pain Management 6. Research Methodology & Biostatistics	2	0	2	
6.	Skill Enhancement Courses	MSO106	1. Soft Tissue & Myofascial Release Techniques	0	0	2	2
			2. Joint Mobilization & Manipulation Techniques	0	0	2	
Total				12	3	10	20
Total Contact Hours				25			



Course outcomes for M.Sc. Osteopathy MAJOR- Advanced Principles of Osteopathy

Sr. No.	Course Outcome	Description
1	Understand the Fundamental Principles of Osteopathy	Explain osteopathic philosophy, the body's self-healing mechanisms, and holistic treatment approaches.
2	Describe the Relationship Between Structure and Function in Osteopathy	Learn how anatomical integrity influences physiological function and overall health.
3	Explain the Role of the Musculoskeletal System in Health and Disease	Understand how dysfunctions in the musculoskeletal system contribute to pain and systemic disorders.
4	Analyze Osteopathic Manipulative Techniques	Learn about high-velocity low-amplitude (HVLA), muscle energy techniques (MET), and myofascial release.
5	Understand the Concept of Somatic Dysfunction	Explain the pathophysiology, assessment methods, and treatment approaches for somatic dysfunctions.
6	Describe the Integration of Osteopathy with Conventional Medicine	Learn about the role of osteopathy in pain management, rehabilitation, and preventive care.
7	Explain the Evidence-Based Applications of Osteopathic Therapy	Understand clinical research findings and their implications for osteopathic practice.
8	Apply Osteopathic Knowledge in Clinical Practice	Develop skills in holistic patient assessment and treatment planning.

Course outcomes for M.Sc. Osteopathy MAJOR- Human Anatomy & Biomechanics for Osteopathy

Sr. No.	Course Outcome	Description
1	Understand the Structural Organization of the Human Body	Explain the anatomy of bones, muscles, joints, ligaments, and fascia relevant to osteopathy.



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Sr. No.	Course Outcome	Description
2	Describe the Biomechanics of the Spine and Extremities	Learn about normal and abnormal movement patterns, joint mechanics, and functional anatomy.
3	Explain the Role of Fascia and Connective Tissue in Movement	Understand fascial networks and their impact on mobility, posture, and pain.
4	Analyze the Neuromuscular Control of Movement	Learn about proprioception, motor control, and the role of the nervous system in movement efficiency.
5	Understand Gait Analysis and Postural Assessment	Explain how biomechanical imbalances contribute to musculoskeletal dysfunctions.
6	Describe the Impact of Repetitive Stress and Injuries on Biomechanics	Learn about overuse injuries, degenerative changes, and compensatory movement patterns.
7	Explain the Influence of Biomechanical Dysfunction on Systemic Health	Understand the osteopathic view of how poor biomechanics affect circulation, lymphatics, and organ function.
8	Apply Biomechanics Knowledge in Osteopathic Practice	Develop assessment skills for identifying biomechanical dysfunctions and formulating treatment strategies.

Course outcomes for M.Sc. Osteopathy MAJOR- Neuro-Musculoskeletal Disorders & Management

Sr. No.	Course Outcome	Description
1	Understand Common Neuro-Musculoskeletal Disorders	Explain conditions like cervical and lumbar radiculopathy, sciatica, carpal tunnel syndrome, and myofascial pain syndromes.
2	Describe the Pathophysiology of Musculoskeletal Dysfunction	Learn about muscle imbalances, joint restrictions, inflammation, and neuropathies.
3	Explain the Role of Osteopathic Techniques in Pain Management	Understand osteopathic interventions for acute and chronic pain conditions.



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Sr. No.	Course Outcome	Description
4	Analyze the Effects of Postural and Ergonomic Factors	Learn how posture, occupational strain, and repetitive movements contribute to musculoskeletal dysfunctions.
5	Understand the Relationship Between Visceral and Musculoskeletal Health	Explain referred pain patterns and somato-visceral interactions in osteopathy.
6	Describe the Rehabilitation Strategies for Neuromuscular Disorders	Learn about therapeutic exercises, soft tissue mobilization, and proprioceptive training.
7	Explain the Role of Lifestyle and Nutrition in Musculoskeletal Health	Understand how diet, hydration, and lifestyle choices influence recovery and function.
8	Apply Osteopathic Management in Clinical Cases	Develop skills in assessing, diagnosing, and treating neuro-musculoskeletal disorders.

Course outcomes for M.Sc. Osteopathy MAJOR- Osteopathic Assessment & Diagnosis

Sr. No.	Course Outcome	Description
1	Understand the Principles of Osteopathic Diagnosis	Explain the role of palpation, motion testing, and functional assessment in diagnosis.
2	Describe the Use of Osteopathic Structural Examination	Learn to assess postural alignment, spinal mobility, and joint integrity.
3	Explain the Concept of Somatic Dysfunction and Its Clinical Relevance	Understand its diagnosis through tissue texture changes, asymmetry, restriction, and tenderness (TART).
4	Analyze the Role of Palpation in Osteopathic Assessment	Learn to identify restrictions, tissue changes, and areas of dysfunction using palpatory skills.
5	Understand the Use of Special Tests in Osteopathy	Explain orthopedic, neurological, and functional tests used to assess musculoskeletal conditions.



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Sr. No.	Course Outcome	Description
6	Describe the Integration of Diagnostic Imaging in Osteopathic Practice	Learn about X-ray, MRI, and ultrasound applications for confirming osteopathic diagnoses.
7	Explain the Importance of a Holistic Patient History	Understand how medical history, lifestyle, and psychosocial factors influence osteopathic diagnoses.
8	Apply Osteopathic Diagnostic Techniques in Clinical Settings	Develop proficiency in conducting comprehensive osteopathic assessments and forming treatment plans.

Course outcomes for M.Sc. Osteopathy MINOR- Sports & Rehabilitation Osteopathy

Sr. No.	Course Outcome	Description
1	Understand the Role of Osteopathy in Sports Medicine	Explain the application of osteopathic techniques for injury prevention and rehabilitation.
2	Describe Common Sports-Related Injuries	Learn about sprains, strains, tendonitis, ligament tears, and joint dysfunctions.
3	Explain Biomechanical Assessment in Athletes	Understand gait analysis, postural screening, and movement pattern assessments.
4	Analyze Rehabilitation Strategies for Athletes	Learn about osteopathic manipulation, soft tissue techniques, and exercise therapy.
5	Understand the Role of Osteopathy in Enhancing Athletic Performance	Explain how osteopathy improves mobility, flexibility, and recovery time.
6	Describe Post-Injury and Post-Surgical Rehabilitation	Learn protocols for post-operative osteopathic interventions and recovery optimization.
7	Explain the Integration of Osteopathy with Strength and Conditioning	Understand how osteopathic care supports strength training and endurance activities.



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Sr. No.	Course Outcome	Description
8	Apply Sports Osteopathy Techniques in Clinical Practice	Develop hands-on skills in treating sports-related injuries and optimizing recovery.

Course outcomes for M.Sc. Osteopathy MINOR- Geriatric Osteopathy

Sr. No.	Course Outcome	Description
1	Understand Age-Related Changes in the Musculoskeletal System	Explain the physiological changes in bones, joints, and muscles with aging.
2	Describe Common Musculoskeletal Disorders in the Elderly	Learn about osteoporosis, arthritis, degenerative disc disease, and sarcopenia.
3	Explain Osteopathic Approaches to Pain Management in Seniors	Understand gentle manipulative techniques for chronic pain relief.
4	Analyze the Role of Osteopathy in Fall Prevention	Learn about balance training, postural correction, and proprioceptive exercises.
5	Understand the Influence of Osteopathy on Geriatric Neurological Health	Explain its role in conditions like Parkinson's disease and stroke recovery.
6	Describe the Role of Osteopathy in Managing Cardiopulmonary Conditions	Learn about the osteopathic approach to respiratory and circulatory health in the elderly.
7	Explain Psychosocial Aspects of Aging and Pain Perception	Understand how osteopathic treatment supports mental well-being in elderly patients.
8	Apply Osteopathic Care for Geriatric Patients	Develop skills in tailoring osteopathic treatments to the specific needs of aging individuals.

Course outcomes for M.Sc. Osteopathy MINOR- Pediatric Osteopathy



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Sr. No.	Course Outcome	Description
1	Understand Growth and Developmental Milestones	Explain normal musculoskeletal development in infants and children.
2	Describe Common Pediatric Musculoskeletal Disorders	Learn about torticollis, scoliosis, clubfoot, and hypermobility syndromes.
3	Explain Osteopathic Approaches to Infant Colic and Reflux	Understand the application of craniosacral therapy and visceral osteopathy.
4	Analyze the Role of Osteopathy in Neurological Pediatric Disorders	Learn about cerebral palsy, autism spectrum disorders, and developmental delays.
5	Understand the Use of Osteopathy for Postural and Gait Abnormalities	Explain assessment and intervention strategies for flat feet, in-toeing, and knock-knees.
6	Describe the Integration of Osteopathy with Other Pediatric Therapies	Learn how osteopathic care complements physiotherapy, occupational therapy, and speech therapy.
7	Explain the Role of Osteopathy in Pediatric Sports Medicine	Understand injury prevention and rehabilitation in young athletes.
8	Apply Pediatric Osteopathy Techniques in Clinical Practice	Develop hands-on skills in treating pediatric musculoskeletal conditions.

Course outcomes for M.Sc. Osteopathy MINOR- Nutritional Aspects in Musculoskeletal Health

Sr. No.	Course Outcome	Description
1	Understand the Role of Nutrition in Bone and Joint Health	Explain the importance of vitamins, minerals, and macronutrients for musculoskeletal function.
2	Describe the Impact of Deficiencies on Musculoskeletal Disorders	Learn about conditions like osteoporosis, osteomalacia, and muscle wasting.



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Sr. No.	Course Outcome	Description
3	Explain Anti-Inflammatory Diets and Their Role in Pain Management	Understand the influence of diet on chronic pain and inflammatory conditions like arthritis.
4	Analyze the Role of Hydration in Musculoskeletal Performance	Learn how dehydration affects muscle function, joint lubrication, and recovery.
5	Understand the Effects of Gut Health on Musculoskeletal Well-being	Explain the connection between the microbiome, inflammation, and musculoskeletal disorders.
6	Describe Nutritional Strategies for Sports Recovery and Injury Healing	Learn about the role of protein synthesis, amino acids, and omega-3 fatty acids.
7	Explain the Role of Osteopathy in Lifestyle and Nutritional Counseling	Understand how osteopaths can guide patients toward better dietary habits.
8	Apply Nutritional Knowledge in Musculoskeletal Health Management	Develop dietary recommendations for patients with musculoskeletal concerns.

Course outcomes for M.Sc. Osteopathy MINOR- Psychosomatic Disorders & Pain Management

Sr. No.	Course Outcome	Description
1	Understand the Mind-Body Connection in Pain Perception	Explain how stress, emotions, and psychological states influence pain.
2	Describe Common Psychosomatic Disorders	Learn about conditions like fibromyalgia, chronic fatigue syndrome, and irritable bowel syndrome (IBS).
3	Explain the Role of Osteopathy in Stress-Related Disorders	Understand craniosacral therapy, myofascial release, and relaxation techniques.
4	Analyze the Effectiveness of Osteopathic Manipulative Treatment (OMT) in Chronic Pain	Learn evidence-based approaches to managing musculoskeletal pain.



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Sr. No.	Course Outcome	Description
5	Understand the Role of the Autonomic Nervous System in Pain	Explain sympathetic overactivity, vagal tone, and their osteopathic modulation.
6	Describe Non-Pharmacological Pain Management Strategies	Learn about mindfulness, biofeedback, and lifestyle interventions.
7	Explain the Role of Osteopathy in Sleep and Mental Health	Understand how osteopathic techniques support better sleep and reduce anxiety/depression.
8	Apply Osteopathic Techniques for Psychosomatic Pain Management	Develop skills in assessing and treating psychosomatic pain conditions.

Course outcomes for M.Sc. Osteopathy MINOR- Research Methodology & Biostatistics

Sr. No.	Course Outcome	Description
1	Understand the Basics of Research in Osteopathy	Explain the principles of clinical research and its relevance to osteopathic practice.
2	Describe the Different Types of Research Designs	Learn about observational studies, randomized controlled trials (RCTs), and meta-analyses.
3	Explain Biostatistical Methods Used in Medical Research	Understand descriptive statistics, inferential statistics, and their applications.
4	Analyze the Process of Data Collection and Analysis	Learn about sampling methods, data reliability, and validity testing.
5	Understand Ethical Considerations in Research	Explain the principles of informed consent, confidentiality, and research integrity.
6	Describe the Role of Evidence-Based Practice in Osteopathy	Learn how to apply research findings to clinical decision-making.



Sr. No.	Course Outcome	Description
7	Explain the Process of Scientific Writing and Publishing	Understand manuscript preparation, peer review, and academic dissemination.
8	Conduct and Present Research in Osteopathy	Develop skills in designing, executing, and presenting osteopathic research projects.

Course Curriculum

The program spans two years, comprising theoretical coursework, practical training, clinical internships, and research projects.

Year 1

Core Modules:

- **Fundamentals of Osteopathic Medicine** – History, philosophy, and principles of osteopathy.
- **Clinical Anatomy & Biomechanics** – Detailed study of musculoskeletal structures and movement analysis.
- **Osteopathic Diagnostic Techniques** – Palpation, postural analysis, and functional assessment.
- **Osteopathic Manipulative Therapy (OMT) - I** – Soft tissue techniques, myofascial release, and joint mobilization.
- **Pain Science & Musculoskeletal Disorders** – Understanding pain mechanisms, chronic pain management, and rehabilitation.
- **Neuromuscular Therapy & Rehabilitation** – Strength training, neuromuscular re-education, and post-injury rehabilitation.

Clinical Training:

- Hands-on training in osteopathy clinics, sports therapy centers, and rehabilitation hospitals.

Year 2

Advanced Modules:

- **Advanced Osteopathic Manipulative Therapy (OMT) - II** – Craniosacral therapy, visceral manipulation, and spinal adjustments.
- **Sports Osteopathy & Injury Prevention** – Techniques for treating sports-related musculoskeletal issues.



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- **Osteopathy in Special Populations** – Pediatric, geriatric, and prenatal osteopathic care.
- **Integrative & Holistic Approaches in Osteopathy** – Combining osteopathy with physiotherapy, acupuncture, and naturopathy.
- **Research Methodology & Biostatistics in Osteopathy** – Conducting clinical research and statistical analysis.
- **Entrepreneurship in Osteopathic Practice** – Setting up osteopathy clinics and wellness centers.

Dissertation & Research Project:

- Independent research on osteopathic techniques, chronic pain management, or biomechanics.

Internships & Clinical Practice:

- Specialized training in osteopathic hospitals, sports clinics, and integrative health centers.

Career and Academic Opportunities

Career Opportunities:

- **Osteopathic Practitioner** – Providing non-invasive musculoskeletal treatments in clinics and hospitals.
- **Sports Rehabilitation Therapist** – Treating athletes and sports-related injuries using osteopathic techniques.
- **Pain Management Specialist** – Working in pain clinics focusing on manual therapy and holistic pain relief.
- **Neuromuscular Therapist** – Specializing in rehabilitation and functional movement therapy.
- **Osteopathy Educator & Researcher** – Teaching and conducting research in osteopathic medicine.
- **Wellness Consultant & Integrative Medicine Specialist** – Combining osteopathy with holistic health approaches.

Higher Education & Research Prospects:

- **Ph.D. in Osteopathic Medicine & Rehabilitation** – Advanced research in osteopathic manual therapy.
- **Fellowship in Sports Osteopathy & Manual Therapy** – Specializing in sports injury management.
- **Master of Public Health (MPH) in Musculoskeletal Health** – Focusing on public health initiatives in osteopathy.

Labs & Training Facilities



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- **Osteopathic Manipulation & Manual Therapy Lab** – Hands-on practice in osteopathic techniques.
- **Biomechanics & Motion Analysis Lab** – Studying human movement and posture correction.
- **Pain Management & Rehabilitation Lab** – Research on osteopathic pain relief and musculoskeletal therapy.
- **Sports Therapy & Injury Prevention Lab** – Training in sports rehabilitation and athletic injury management.
- **Clinical Research & Biostatistics Lab** – Conducting evidence-based research in osteopathy.
- **Integrative & Holistic Medicine Training Unit** – Exploring complementary therapies in osteopathic practice.

Course Structure & Syllabus

Total Course Duration: 2 Years (4 Semesters)

Total Credits: 80–100

Total Teaching & Training Hours: ~3,600

Assessment Methods

Assessment Component	Weightage (%)	Details
Continuous Internal Assessment (CIA)	40%	Includes internal exams, assignments, presentations, case studies, and practical performance
End-Semester Examination (ESE)	60%	Divided into theory (40%) and practical (20%)
Mid-Semester Exams	20% (Part of CIA)	Two internal tests per semester
Assignments & Case Studies	5% (Part of CIA)	Research-based assignments, patient case studies, and literature reviews
Seminars & Presentations	5% (Part of CIA)	Oral/poster presentations on osteopathic techniques and rehabilitation
Practical Performance & Clinical Evaluation	5% (Part of CIA)	Skill-based assessments in osteopathy labs and clinical settings
Attendance & Participation	5% (Part of CIA)	Regularity in theory & practical sessions



Assessment Component	Weightage (%)	Details
Theory Examination (Final)	40% (Part of ESE)	Structured written paper covering subject knowledge
Practical Examination (Final)	20% (Part of ESE)	Includes viva, skill demonstration, and osteopathic case handling
Dissertation/Research Project	Mandatory	Evaluated in the final year by internal & external examiners
Clinical Internship/Training in Osteopathy & Rehabilitation Centers	Pass/Fail	Logbook-based evaluation with mentor review

Marking System & Grading

Marks (%)	Grade	Grade Point (GPA/CGPA Equivalent)	Classification
90 - 100	O (Outstanding)	10	First Class with Distinction
80 - 89	A+ (Excellent)	9	First Class with Distinction
70 - 79	A (Very Good)	8	First Class
60 - 69	B+ (Good)	7	First Class
50 - 59	B (Satisfactory)	6	Second Class
<50 (Fail)	F (Fail)	0	Fail (Re-exam Required)

Pass Criteria:

- **Minimum 50% marks in each subject** (Theory & Practical separately).
- **Aggregate of 55% required for progression** to the next semester.
- **No more than two backlogs** allowed for promotion to the final year.

Exam Pattern for Theory & Practical

A. Theory Examination Pattern

Total Marks: 100 (Converted to 40% for End-Semester Assessment)

Duration: 3 Hours



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Section	Question Type	No. of Questions	Marks per Question	Total Marks
Section A	Short Answer Type (SAQ)	10 (Attempt all)	2	20
Section B	Long Answer Type (LAQ)	5 (Attempt any 4)	10	40
Section C	Case-Based/Clinical Scenarios	3 (Attempt any 2)	15	30
Section D	MCQs/Objective Type	10 (Compulsory)	1	10
Total				100

Weightage:

- Musculoskeletal & Neuromuscular Osteopathic Techniques – 40%
- Osteopathic Diagnosis & Manual Therapy – 30%
- Research & Case Studies – 20%
- Rehabilitation & Preventive Osteopathy – 10%

Passing Criteria: Minimum **50% (50/100 marks)**

B. Practical Examination Pattern

Total Marks: 100 (Converted to 20% for End-Semester Assessment)

Duration: 4–6 Hours

Component	Marks Distribution
Clinical Case Presentation & Musculoskeletal Assessment	30
OSCE (Objective Structured Clinical Examination) – Skill Demonstration	25
Manual Therapy Techniques & Osteopathic Manipulative Procedures	20
Lab-Based Examination (Postural Analysis, Biomechanical Assessment, Joint Mobility Testing)	15
Record Work (Logbook & Assignments)	10
Total	100

OSCE (Skill-based Assessment) includes stations on:

- Palpation & Soft Tissue Manipulation Techniques



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- Spinal & Joint Mobilization Procedures
- Postural & Gait Analysis
- Diagnosis & Treatment Planning for Musculoskeletal Conditions

Passing Criteria: Minimum 50% (50/100 marks) in practicals.

Conclusion

The M.Sc. in Osteopathy prepares graduates for specialized roles in musculoskeletal therapy, pain management, and holistic healthcare. With increasing demand for non-invasive treatments, this program ensures strong expertise in osteopathic medicine, rehabilitation, and sports therapy, offering vast opportunities in both clinical and research domains.

