

# Study & Evaluation Scheme

of

## Master of Physiotherapy (ORTHOPAEDICS)

[Applicable w.e.f. Academic Session – 2019-2020]

*[As per CBCS guidelines given by UGC]*



**TEERTHANKER MAHAVEER UNIVERSITY**

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## Program Structure-MPT

### A. Introduction:

High quality physiotherapy education is essential for this post modern era. People require rehabilitation in different aspects of life. A specialized physiotherapist is well equipped to cater to such needs. The curriculum is designed such that the student can gain in depth mastery of the academic disciplines and applied functional areas as per the individual requirements of the patient population.

The institute emphasis on the following courses *balanced with core and elective courses*: The curriculum of MPT program emphasizes an intensive, flexible physiotherapy education with 17 credits of Core Courses, 48 credits of Skill Enhancement courses, 6 credits of Ability Enhancement Compulsory Courses, 6 credits of Research Project Report 10 credits of Discipline Specific Elective Courses .Total 87 credits are allotted for the MPT degree.

The institute offers MPT with four specializations viz., Musculoskeletal, Cardiorespiratory, Neurosciences, and Sports. The expansion of the hospitals in the present scenario requires candidates with strong professional attitudes. There is a massive demand for candidates who can fit into specified roles with adequate efficiency, and an MPT degree solves this demand-supply gap.

Course handouts for students will be provided in every course. A course handout is a thorough teaching plan of faculty taking up a course. It is a blueprint which will guide the students about the pedagogical tools being used at different stages of the syllabus coverage and more specifically the topic-wise complete plan of discourse, that is, how the faculty members treat each and every topic from the syllabus and what they want the student to do, as an extra effort, for creating an effective learning. It may be a case study, a role-play, a classroom exercise, an assignment home or field, or anything else which is relevant and which can enhance their learning about that particular concept or topic. Due to limited availability of time, most relevant topics will have this kind of method in course handout.

MPT : Two-Year (4-Semester) CBCS Program			
Basic Structure: Distribution of Courses			
S.No.	Type of Course	Credit Hours	Total Credits
1	Core Course (CC)	6 Courses of 2-4 credit hours each	17
2	Skill-Enhancement Course (SEC)	6 Courses of 4 to 12 credit hours each	48
3	Program/Discipline Specific Elective Course (DSEC)	16 Courses of 4 or 1 credit hours each	10
4	Ability Enhancement Compulsory Course (AECC)	2 Course of 2 or 4 credit hours each	6
5	Value Added Course (VAC)	2 Courses of 0 credit hours each	0
6.	Research Project Report (RPR)	2 Course of 2 or 4 credit hours each	6
Total Credits			87

### B. Choice Based Credit System(CBCS)

Choice Based Credit System (CBCS) is a versatile and flexible option for each student to achieve his/her target number of credits as specified by the UGC and adopted by our University.





The following is the course module designed for the MPT program:

**Core Course (CC):** Core courses of MPT program will provide a holistic approach to physiotherapy education, giving students an overview of the field, a basis to build and specialize upon. These core courses are the strong foundation to establish physiotherapy knowledge and provide broad multi-disciplined knowledge can be studied further in depth during the elective phase.

The core courses will provide more practical-based knowledge, case-based lessons and collaborative learning models. It will train the students to analyze, decide, and develop an evidence based rehabilitation program based on the individual needs of the patients with different conditions.

A wide range of core courses provides groundwork in the basic physiotherapy disciplines: musculoskeletal disorders, cardiorespiratory disorders, neurological disorders and sports rehabilitation.

We offer core courses in semester I, II during the MPT program. There will be 17 credits in all for core courses offered.

**Skill Enhancement Course (SEC):** This course provides value-based and/or skill-based knowledge. We offer four SECs- one in each Semester. SEC will carry 48 credits in all.

**Value Added Course (VAC):** A value added course is a non-credit course which is basically meant to enhance general ability of students in areas like soft skills, quantitative aptitude and reasoning ability - required for the overall development of a student and at the same time crucial for industry/corporate demands and requirements. The student possessing these skills will definitely develop acumen to perform well during the recruitment process of any premier organization and will have the desired confidence to face the interview. Moreover, these skills are also essential in day-to-day life of the medical world. The aim is to nurture every student for making effective communication, developing aptitude and a general reasoning ability for a better performance, as desired in medical world. There shall be one course each in Semester I & Semester II and will carry no credit, however, it will be compulsory for every student to pass these courses with minimum 45% marks to be eligible for the certificate. These marks will not be included in the calculation of CGPI. Students have to specifically be registered in the specific course of their respective semesters.

**Program/Discipline Specific Elective Course (DSEC):** The discipline specific elective course is chosen to make students specialist or having specialized knowledge of a specific domain like Cardiorespiratory, neurosciences, musculoskeletal and Sports. It will be covered in two semesters (III&IV) of second year of the program relevant to chosen disciplines of the program. The student will have to choose any one specialization out of the four specializations offered, i.e., Cardiorespiratory, Neurosciences, Musculoskeletal and Sports.. Each student will have to choose four discipline specific elective courses (DSECs) in the specializations chosen; 2 in Semester III and 2 in Semester IV respectively. DSEC will carry 10 credits.

**Research Project Report (RPR):** In addition to learning research theory there will be mandatory individual research project. It will enable the students to demonstrate skill in conducting research, interpreting and utilizing the findings from health related research which will provide hands on experience in addition to theory in health care settings. It will be assessed and the 6 credits earned will be included for the calculations of the CGPA.

### C. Program Specific Outcomes (PSOs)

On completion of the program, the students will be:





PSO – 1	Remembering, retrieving and integrating the information on Musculoskeletal conditions, Neurological disabilities, Cardiorespiratory dysfunctions, sports injuries and other general conditions
PSO – 2	Understanding the professional ethics, functioning of hospital and other clinical setups, use it effectively in clinical practice to become an efficient worker, administrator and manager.
PSO – 3	Applying advanced concepts of physiotherapeutics, electrophysiology and biomechanics to build expertise in area-specific clinical intervention techniques and patient assessment.
PSO – 4	Demonstrating responsibility towards community health rehabilitation and communicate effectively with patients, caretakers, other healthcare professionals and students using important soft skills and clinical reasoning.
PSO – 5	Discovering the relevant physiotherapy research arenas and uphold Evidence Based Practice for further research and clinical work.
PSO – 6	Developing critical and analytical thinking to effectively assess and provisionally diagnose the patient and apply skills of advanced physiotherapy procedure and techniques.

**D. Pedagogy & Unique practices adopted:** “Pedagogy is the method and practice of teaching, especially for teaching an academic subject or theoretical concept”. In addition to conventional time-tested lecture method, the institute will **emphasize on experiential learning**:

**1. Induction and orientation program:** A fifteen day program by professionals and experts is conducted for the first semester students on a variety of topics like time management, presentation, professionalism, knowledge building and stress coping amongst others. The program is aimed at preparing students for the upcoming years, to practice theoretical concepts, logical thinking, reasoning and evaluation skills in clinical setups.

**2. Theory to practical application in Clinical Training:** Patient assessment, physical examination, provisional diagnosis and physiotherapeutic treatment are an integral part of physiotherapy practice. The technique to apply the theoretical knowledge onto patients in a hospital setting helps in developing critical and analytical thinking, practical and decision making skills. Students utilize the concepts, principles and techniques for patient evaluation and management in real-life settings of hospital.

**3. Case Based Learning:** Case based learning enhances student skills at delineating the critical decision dilemma faced during patient prescription, helps in applying concepts, principles and analytical skills to solve the delineated problems and develops effective templates for formulating effective treatment regimes. Case method of teaching is used as a critical learning tool for effective learning and we encourage it to the fullest.

**4. Student seminars and case presentations:** Enhancement of communication and practical skills, participation, group discussion and healthy discussion between professionals is promoted among students and with teachers. The case topic knowledge, presentation skills, audience interaction and ability to answer queries are the skills promoted by this practice.

**5. Educational tours:** Potential of future internship and work are explored by visits to prospective cities. Students can decide the institute of choice based on future plans, goals and feasibility.

**6. Workshops, conferences and Guest lectures:** Educational and motivational content and talks delivered by multiple experts from various fields and professions to inculcate concepts, skills, techniques and research advances among students. Students learn and practice the acquired knowledge and interact with professionals and specialists for overall education and learning experience.





*Semester-2*

S.No	Category	Course Name	Course Code	Periods			Credits	Evaluation		
				L	T	P		Internal	External	Total
1.	CC-1	Research Methodology & Biostatistics	MPT110	4	-	-	4	40	60	100
2.	CC-2	Exercise Physiology	MPT111	3	-	-	3	40	60	100
3.	CC-3	Electrophysiology	MPT112	2	-	-	2	40	60	100
4.	SEC-1	Clinical Training	MPT161	-	-	16	8	50	50	100
				9	-	16	17	170	230	400

1.	VAC-1	Managing Self	TMUPS101	2	1	-	0	50	50	100
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**SEMESTER -II**

S.No.	Category	Course name	Course Code	Periods			Credits	Evaluation		
				L	T	P		Internal	External	Total
1.	CC-4	Biomechanics	MPT210	2	-	-	2	40	60	100
2.	CC-5	Physical and functional diagnosis	MPT211	3	-	-	3	40	60	100
3.	CC-6	Physiotherapeutics	MPT212	3	-	-	3	40	60	100

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4.	SEC-2	Clinical training	MPT261	-	-	16	8	50	50	100
				8	-	16	16	170	230	400

1.	VAC-2	Managing Work & Others	TMUPS2 01	2	1	-	0	50	50	100
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### SEMESTER - III

S.No.	Category	Course name	Course Code	Periods			Credits	Evaluation		
				L	T	P		Internal	External	
1.	SEC-3	Clinical training	MPT361	-	-	24	12	50	50	
2.	AECC-1	Ethics and Pedagogy	MPT314	3	1	-	4	40	60	
3.	RPR-1	Research Project	MPT369	-	-	4	2	50	50	
4.	SEC-4	Journal Presentation	MPT362	-	-	8	4	100	-	

#### **DISCIPLINE SPECIFIC ELECTIVES**

*(Candidate shall select any one course with corresponding Lab as per the choice of specialization)*

5.a.	DSEC-1	Cardiorespiratory disorders-I	MPT315	4	-	-	4	40	60	
5.b.	DSEC-2	Cardiorespiratory disorders-I (Lab)	MPT365	-	-	2	1	50	50	
6.a.	DSEC-3	Neurological Disorders-I	MPT316	4	-	-	4	40	60	
6.b.	DSEC-4	Neurological disorders-I (Lab)	MPT366	-	-	2	1	50	50	
7.a.	DSEC-5	Musculoskeletal Disorders-I	MPT317	4	-	-	4	40	60	
7.b.	DSEC-6	Musculoskeletal disorders-I (Lab)	MPT367	-	-	2	1	50	50	
8.a.	DSEC-7	Sport Disorders-I	MPT318	4	-	-	4	40	60	
8.b.	DSEC-8	Sport disorders-I (Lab)	MPT368	-	-	2	1	50	50	
				7	1	38	27	330	270	






## SEMESTER – IV

S.No.	Category	Course name	Course Code	Periods			Credits	Evaluation		
				L	T	P		Internal	External	Total
1.	AECC-2	Administration & Management	MPT410	2	-	-	2	40	60	100
2.	SEC-5	Clinical training	MPT461	-	-	24	12	50	50	100
3.	SEC-6	Journal Presentation	MPT462	-	-	8	4	100	-	100
4.	RPR-2	Dissertation	MPT469	-	-	8	4	50	50	100

### **DISCIPLINE SPECIFIC ELECTIVES**

*(The choice of elective shall be same as that chosen in III semester)*

5.a.	DSEC-9	Cardiorespiratory disorders-II	MPT415	4	-	-	4	40	60	100
5.b.	DSEC-10	Cardiorespiratory disorders-II (Lab)	MPT465	-	-	2	1	50	50	100
6.a.	DSEC-11	Neurological disorders-II	MPT416	4	-	-	4	40	60	100
6.b.	DSEC-12	Neurological disorders-II (Lab)	MPT466	-	-	2	1	50	50	100
7.a.	DSEC-13	Musculoskeletal disorders-II	MPT417	4	-	-	4	40	60	100
7.b.	DSEC-14	Musculoskeletal disorder-II (Lab)	MPT467	-	-	2	1	50	50	100
8.a.	DSEC-15	Sport disorders-II	MPT418	4	-	-	4	40	60	100
8.b.	DSEC-16	Sport disorders-II (Lab)	MPT468	-	-	2	1	50	50	100
				6	-	42	27	330	270	600

**Note :**

L- Lecture	T- Tutorial	P- Practical	C- Credits
1C = 1 Hour L or T			
1C = 2 Hour P			

