

# **SWAMI VIVEKANAND UNIVERSITY, SIRONJA, SAGAR (M.P.)**



## **SYLLABUS**

**For**

**MASTER OF TECHNOLOGY (M.Tech)  
Constraction Technology &  
Management**

**Course Code : MTCEC**

Department of Civil Engineering

Faculty of Engineering

|                    |            |
|--------------------|------------|
| Duration of Course | : 2 Years  |
| Examination Mode   | : Semester |
| Examination System | : Grading  |

Swami Vivekanand University, Sironja Sagar (M.P.)  
2016-2017



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course :M.TECH.-Construction Technology &  
Management

Department : Civil Engineering  
Course Code : MTCEC  
Semester/Year :- 1 Sem

| Paper /<br>Subject<br>Code | Title of the Paper / Subject                            | Credit Allotted |    |    | Total<br>Credit | Distribution of Marks |     |            |           |                        |            |     |          |                               |                      | Duration<br>of Theory<br>Exam |
|----------------------------|---|-----------------|----|----|-----------------|-----------------------|-----|------------|-----------|------------------------|------------|-----|----------|-------------------------------|----------------------|-------------------------------|
|                            |   | L               | T  | P  |                 | Theory                |     |            |           |                        | Practical  |     |          | Grand<br>Total<br>(H=<br>D+G) |                      |                               |
|                            |   |                 |    |    |                 | End Sem.              |     | Internal   |           | Total<br>(D=<br>A+B+C) | End Sem.   |     | Internal |                               | Total<br>(G=<br>E+F) |                               |
|                            |   |                 |    |    |                 | Max<br>(A)            | Min | MST<br>(B) | TW<br>(C) |                        | Max<br>(E) | Min |          |                               |                      |                               |
| MTCEC -<br>0101            | Advanced Engineering Mathematics                        | 3               | 1  | -  | 4               | 70                    | 28  | 20         | 10        | 100                    | -          | -   | -        | -                             | 100                  | 3 Hrs                         |
| MTCEC -<br>0102            | Construction Material                                   | 3               | 1  | -  | 4               | 70                    | 28  | 20         | 10        | 100                    | -          | -   | -        | -                             | 100                  | 3 Hrs                         |
| MTCEC -<br>0103            | Advance Geo Technical Engineering                       | 3               | 1  | -  | 4               | 70                    | 28  | 20         | 10        | 100                    | -          | -   | -        | -                             | 100                  | 3 Hrs                         |
| MTCEC -<br>0104            | Construction Technology                                 | 3               | 1  | -  | 4               | 70                    | 28  | 20         | 10        | 100                    | -          | -   | -        | -                             | 100                  | 3 Hrs                         |
| MTCEC -<br>0105            | Low Cost Building Material &<br>Construction Techniques | 3               | 1  | -  | 4               | 70                    | 28  | 20         | 10        | 100                    | -          | -   | -        | -                             | 100                  | 3 Hrs                         |
| MTCEC -<br>0106            | Lab-I(Computer Workshop)                                | -               | -  | 6  | 6               | -                     | -   | -          | -         | -                      | 90         | 36  | 60       | 150                           | 150                  | -                             |
| MTCEC -<br>0107            | Lab-II(Advance Construction-I)                          | -               | -  | 6  | 6               | -                     | -   | -          | -         | -                      | 90         | 36  | 60       | 150                           | 150                  | -                             |
|                            | Total   | 15              | 05 | 12 | 32              | 350                   |     | 100        | 50        | 500                    | 180        | -   | 120      | 300                           | 800                  |                               |



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : M.Tech in C.T.M.

Department : Civil Engineering  
Course Code : MTCEC

Semester/Year :- 2 Sem

| Paper / Subject Code | Title of the Paper / Subject                    | Credit Allotted |    |    | Total Credit | Distribution of Marks |     |          |        |                 |           |     |          |                     |               | Duration of Theory Exam |
|----------------------|---|-----------------|----|----|--------------|-----------------------|-----|----------|--------|-----------------|-----------|-----|----------|---------------------|---------------|-------------------------|
|                      |   | L               | T  | P  |              | Theory                |     |          |        |                 | Practical |     |          | Grand Total (H=D+G) |               |                         |
|                      |   |                 |    |    |              | End Sem.              |     | Internal |        | Total (D=A+B+C) | End Sem.  |     | Internal |                     | Total (G=E+F) |                         |
|                      |   |                 |    |    |              | Max (A)               | Min | MST (B)  | TW (C) |                 | Max (E)   | Min |          |                     |               |                         |
| MTCEC -0201          | Construction Management                         | 3               | 1  | -  | 4            | 70                    | 28  | 20       | 10     | 100             | -         | -   | -        | -                   | 100           | 3 Hrs                   |
| MTCEC -0202          | Fabrication Design & Its Construction           | 3               | 1  | -  | 4            | 70                    | 28  | 20       | 10     | 100             | -         | -   | -        | -                   | 100           | 3 Hrs                   |
| MTCEC -0203          | Construction Equipment & Material Management    | 3               | 1  | -  | 4            | 70                    | 28  | 20       | 10     | 100             | -         | -   | -        | -                   | 100           | 3 Hrs                   |
| MTCEC -0204          | Financial Management In Construction Industries | 3               | 1  | -  | 4            | 70                    | 28  | 20       | 10     | 100             | -         | -   | -        | -                   | 100           | 3 Hrs                   |
| MTCEC -0205          | Appropriate Technology & Energy Conservation    | 3               | 1  | -  | 4            | 70                    | 28  | 20       | 10     | 100             | -         | -   | -        | -                   | 100           | 3 Hrs                   |
| MTCEC -0206          | Lab-Iii(Construction Management Software))      | -               | -  | 6  | 6            | -                     | -   | -        | -      | -               | 90        | 36  | 60       | 150                 | 150           | -                       |
| MTCEC -0207          | Lab-Iv(Advance Construction –Ii)                | -               | -  | 6  | 6            | -                     | -   | -        | -      | -               | 90        | 36  | 60       | 150                 | 150           | -                       |
|                      | Total   | 15              | 05 | 12 | 32           | 350                   | -   | 100      | 50     | 500             | 180       | -   | 120      | 300                 | 800           |                         |



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : M.Tech in C.T.M.

Department : Civil Engineering  
Course Code : MTCEC

Semester/Year :- 3 Sem

| Paper / Subject Code | Title of the Paper / Subject   | Credit Allotted |          |           | Total Credit | Distribution of Marks |          |           |           |                  |            |          |           |                      |                | Duration of Theory Exam |
|----------------------|--|-----------------|----------|-----------|--------------|-----------------------|----------|-----------|-----------|------------------|------------|----------|-----------|----------------------|----------------|-------------------------|
|                      |  | L               | T        | P         |              | Theory                |          |           |           |                  | Practical  |          |           | Grand Total (H= D+G) |                |                         |
|                      |  |                 |          |           |              | End Sem.              |          | Internal  |           | Total (D= A+B+C) | End Sem.   |          | Internal  |                      | Total (G= E+F) |                         |
|                      |  |                 |          |           |              | Max (A)               | Min      | MST (B)   | TW (C)    |                  | Max (E)    | Min      |           |                      |                |                         |
| MTCEC - 0301         | Elective-I   | 3               | 1        | -         | 4            | 70                    | 28       | 20        | 10        | 100              | -          | -        | -         | -                    | 100            | 3 Hrs                   |
| MTCEC - 0302         | Elective-II  | 3               | 1        | -         | 4            | 70                    | 28       | 20        | 10        | 100              | -          | -        | -         | -                    | 100            | 3 Hrs                   |
| MTCEC - 0303         | Project  | -               | -        | 4         | 4            | -                     | -        | -         | -         | -                | 100        | 30       | -         | 100                  | 100            | -                       |
| MTCEC - 0304         | Dissertation Part-I (Literature Review/Problem Formulation/Synopsis) | -               | -        | 8         | 8            | -                     | -        | -         | -         | -                | 120        | 48       | 80        | 200                  | 200            |                         |
|                      | <b>Total</b>   | <b>6</b>        | <b>2</b> | <b>12</b> | <b>20</b>    | <b>140</b>            | <b>-</b> | <b>40</b> | <b>20</b> | <b>200</b>       | <b>220</b> | <b>-</b> | <b>80</b> | <b>300</b>           | <b>500</b>     |                         |



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : M.Tech in C.T.M.

Department : Civil Engineering  
Course Code : MTCEC

Semester/Year :- 4 Sem

| Paper / Subject Code | Title of the Paper / Subject | Credit Allotted |   |    | Total Credit | Distribution of Marks |     |          |        |                  |           |     |          |                      |                | Duration of Theory Exam |
|----------------------|------------------------------|-----------------|---|----|--------------|-----------------------|-----|----------|--------|------------------|-----------|-----|----------|----------------------|----------------|-------------------------|
|                      |                              | L               | T | P  |              | Theory                |     |          |        |                  | Practical |     |          | Grand Total (H= D+G) |                |                         |
|                      |                              |                 |   |    |              | End Sem.              |     | Internal |        | Total (D= A+B+C) | End Sem.  |     | Internal |                      | Total (G= E+F) |                         |
|                      |                              |                 |   |    |              | Max (A)               | Min | MST (B)  | TW (C) |                  | Max (E)   | Min |          |                      |                |                         |
| MTCEC - 0401         | Dissertation Part- II        | -               | - | 20 | 20           | -                     | -   | -        | -      | -                | 300       | 120 | 200      | 500                  | 500            | -                       |
|                      | Total                        | -               | - | 20 | 20           | -                     | -   | -        | -      | -                | 300       | 120 | 200      | 500                  | 500            |                         |