

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



SCHEME

For

Master of Technology (M. Tech)

Power System Engineering

Course Code: MTPS

Department of Electrical & Electronics Engineering
Faculty of Engineering

Duration of Course : 2 Year

Examination Mode : Semester

Examination System : Grading

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



Faculty : Engineering

Department : Electrical & Electronics Engg.

Scheme of Course : M.Tech Course Code : MTPS Semester / Year – I/I

| Paper Code | Title of the Paper | Periods Per week | | | | Distribution of Marks | | | | | | | | | Grand Total (j=e+i) |
|------------|---|------------------|---|----|----|-----------------------|---------|----------|--------|-----------------|-----------|---------|--------|---------------|---------------------|
| | | L | T | P | C | Theory | | | | Total (e=a+c+d) | Practical | | | Total (i=f+h) | |
| | | | | | | Max (a) | Min (b) | MS T (c) | TW (d) | | Max (f) | Min (g) | TW (h) | | |
| MTPS-0101 | ADVANCED MATHEMATICS | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS-0102 | POWER SYSTEM DYNAMICS AND CONTROL | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS-0103 | ADVANCED POWER SYSTEM PROTECTION RELAYS | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS-0104 | POWER ELECTRONICS APPLICATION IN POWER SYSTEM | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS-0105 | ADVANCED COURSE IN ELECTRICAL MACHINE | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS-0106 | LAB-I (POWER ELECTRONICS LAB) | - | - | 6 | 6 | - | - | - | - | - | 90 | | 60 | 150 | 150 |
| MTPS-0107 | LAB-II (POWER SYSTEM LAB) | - | - | 6 | 6 | - | - | - | - | - | 90 | | 60 | 150 | 150 |
| | Total | 15 | 5 | 12 | 32 | 350 | | 100 | 50 | 500 | 180 | | 120 | 300 | 800 |



Faculty : Engineering

Department : Electrical & Electronics Engg.

Scheme of Course : M.Tech Course Code : MTPS Semester / Year – II/I

| Paper Code | Title of the Paper | Periods Per week | | | | Distribution of Marks | | | | | | | | | Grand Total (j=e+i) |
|------------|---|------------------|---|----|----|-----------------------|---------|----------|--------|-----------------|-----------|---------|--------|---------------|---------------------|
| | | L | T | P | C | Theory | | | | Total (e=a+c+d) | Practical | | | Total (i=f+h) | |
| | | | | | | Max (a) | Min (b) | MS T (c) | TW (d) | | Max (f) | Min (g) | TW (h) | | |
| MTPS -201 | REACTIVE POWER CONTROL & FACTS | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS -202 | ENERGY CONSERVATION AND MANAGEMENT | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS -203 | POWER QUALITY AND CONDITIONING | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS -204 | RESTRUCTURED POWER SYSTEMS | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS -205 | POWER SYSTEM TRANSIENTS | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS -206 | LAB-III (ADVANCED POWER SYSTEM LAB) | - | - | 6 | 6 | - | - | - | - | - | 90 | - | 60 | 150 | 150 |
| MTPS -207 | LAB-IV (COMPUTER APPLICATION IN POWER SYSTEM) | - | - | 6 | 6 | - | - | - | - | - | 90 | - | 60 | 150 | 150 |
| | Total | 15 | 5 | 12 | 32 | 350 | | 100 | 50 | 500 | 180 | | 120 | 300 | 800 |



Faculty : Engineering

Department : Electrical & Electronics Engg.

Scheme of Course : M.Tech Course Code : MTPS Semester / Year – III/II

| Paper Code | Title of the Paper | Periods Per week | | | | Distribution of Marks | | | | | | | | | Grand Total (j= e+i) |
|------------|---------------------|------------------|---|----|----|-----------------------|---------|---------|--------|-------------------|-----------|---------|--------|-----------------|----------------------|
| | | L | T | P | C | Theory | | | | Total (e= a+c +d) | Practical | | | Total (i= f+h) | |
| | | | | | | Max (a) | Min (b) | MST (c) | TW (d) | | Max (f) | Min (g) | TW (h) | | |
| MTPS-0301 | ELECTIVE-I | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS-0302 | ELECTIVE-II | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS-0303 | SEMINAR | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| MTPS-0304 | DISSERTATION PART-I | 3 | 1 | - | 4 | 70 | 28 | 20 | 10 | 100 | - | - | - | - | 100 |
| Total | | 15 | 5 | 12 | 32 | 350 | | 100 | 50 | 500 | 180 | | 120 | 300 | 800 |

| ELECTIVE-I | ELECTIVE-II |
|----------------------------------|-------------------------------|
| (A) POWER SYSTEM INSTRUMENTATION | (A)SPECIAL MACHINES |
| (B)DSP AND ITS APPLICATION | (B)ADVANCED ELECTRICAL DRIVES |
| (C)POWER CONTROLLER | |



Faculty : Engineering Department : Electrical & Electronics Engg.
Scheme of Course : M.Tech Course Code : MTPS Sem / Year – IV/II

| Paper Code | Title of the Paper | Periods Per week | | | | Distribution of Marks | | | | | | | Grand Total (i= d+h) | |
|------------|-----------------------|------------------|---|----|----|-----------------------|---------|---------|----------------|-----------|---------|--------|----------------------|----------------|
| | | L | T | P | C | Theory | | MST (c) | Total (d= a+c) | Practical | | TW (g) | | Total (h= e+g) |
| | | | | | | Max (a) | Min (b) | | | Max (e) | Min (f) | | | |
| MTPS-0401 | Dissertation Part- II | - | - | 20 | 20 | - | - | - | - | 300 | 120 | 200 | 500 | 500 |
| Total | | - | - | 20 | 20 | - | - | - | - | 300 | - | 200 | 500 | 500 |