

# MGU-UGP-2024

## COMPUTER SCIENCE

### MINOR

| Level   | Sem | Course Title                                | Credit |     | Hours Per week |     |     | Marks |     |     |
|---------|-----|---------------------------------------------|--------|-----|----------------|-----|-----|-------|-----|-----|
|         |     |                                             | L-T-P  | Tot | Theory         | Lab | Tot | Int   | Ext | Tot |
| 100-199 | 1   | Art of Computing and Problem Solving        | 3-0-1  | 4   | 3              | 2   | 5   | 30    | 70  | 100 |
|         | 2   | Python Programming                          | 3-0-1  | 4   | 3              | 2   | 5   | 30    | 70  | 100 |
| 200-299 | 3   | Python for Data Analytics                   | 3-0-1  | 4   | 3              | 2   | 5   | 30    | 70  | 100 |
|         | 4   | Fundamentals of Database Management Systems | 3-0-1  | 4   | 3              | 2   | 5   | 30    | 70  | 100 |

### MDC

| Level   | Sem | Sl No | Course Title                   | Credit |     | Hours Per week |     |     | Marks |     |     |
|---------|-----|-------|--------------------------------|--------|-----|----------------|-----|-----|-------|-----|-----|
|         |     |       |                                | L-T-P  | Tot | Theory         | Lab | Tot | Int   | Ext | Tot |
| 100-199 | 1   | 1     | Cyber Laws and Online Safety   | 2-0-1  | 3   | 2              | 2   | 4   | 30    | 70  | 100 |
|         |     | 2     | Internet and Web Technologies  | 2-0-1  | 3   | 2              | 2   | 4   | 30    | 70  | 100 |
|         | 2   | 1     | Data Visualization with Python | 2-0-1  | 3   | 2              | 2   | 4   | 30    | 70  | 100 |
|         |     | 2     | Mastering Spreadsheets         | 2-0-1  | 3   | 2              | 2   | 4   | 30    | 70  | 100 |
| 200-299 | 3   | 1     | Cloud Computing Essentials     | 3-0-0  | 3   | 3              | 0   | 3   | 30    | 70  | 100 |

### SEC

| Level   | Sem | Sl. No | Course Title                           | Credit |     | Hours Per week |     |     | Marks |     |     |
|---------|-----|--------|----------------------------------------|--------|-----|----------------|-----|-----|-------|-----|-----|
|         |     |        |                                        | L-T-P  | Tot | Theory         | Lab | Tot | Int   | Ext | Tot |
| 200-299 | 4   | 1      | Computer Hardware Maintenance          | 2-1-0  | 3   | 3              | 0   | 3   | 30    | 70  | 100 |
|         |     | 2      | Visualization Tools for Data Analytics | 2-1-0  | 3   | 3              | 0   | 3   | 30    | 70  | 100 |

### VAC

| Level   | Sem | Course Title               | Credit |     | Hours Per week |     |     | Marks |     |     |
|---------|-----|----------------------------|--------|-----|----------------|-----|-----|-------|-----|-----|
|         |     |                            | L-T-P  | Tot | Theory         | Lab | Tot | Int   | Ext | Tot |
| 200-299 | 3   | White Hat Hacking          | 3-0-0  | 3   | 3              | 0   | 3   | 30    | 70  | 100 |
|         | 4   | Green Computing Techniques | 3-0-0  | 3   | 3              | 0   | 3   | 30    | 70  | 100 |