

**VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT**  
**M.Sc. (I.T.) [Five Years Integrated Course]**  
**B.Sc. (Information Technology)**  
**Semester: 1**

| Paper Sr. No. | Paper Title                                    | Teaching Schedule (Hours/Week) |      | University Exam Theory / Practical |       | Internal Exam Theory / Practical |       | Total Theory / Practical |
|---------------|--|--------------------------------|------|------------------------------------|-------|----------------------------------|-------|--------------------------|
|               |  | Lect                           | Prac | Duration   Hrs.                    | Marks | Duration   Hrs.                  | Marks |                          |
| 101           | Maths - I                                      | 4                              | -    | 3                                  | 70    | 2                                | 30    | 100                      |
| 102           | Computer Fundamentals                          | 4                              | -    | 3                                  | 70    | 2                                | 30    | 100                      |
| 103           | Computer Programming & Programming Methodology | 4                              | -    | 3                                  | 70    | 2                                | 30    | 100                      |
| 104           | PC Software & Hardware Troubleshooting         | 4                              | -    | 3                                  | 70    | 2                                | 30    | 100                      |
| 105           | Communication Skills                           | 4                              | -    | 3                                  | 70    | 2                                | 30    | 100                      |
| 106           | Practical                                      |                                | 10   | 5                                  | 140   | 3                                | 60    | 200                      |
| <b>Total</b>  |  | 30                             |      |                                    | 490   |                                  | 210   | 700                      |

**VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT**  
**M.Sc. (I.T.) [Five Years Integrated Course]**  
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**Semester: 2**

| Paper Sr. No. | Paper Title         | Teaching Schedule (Hours/Week) |      | University Exam Theory / Practical |       | Internal Exam Theory / Practical |       | Total Theory / Practical |
|---------------|---------------------|--------------------------------|------|------------------------------------|-------|----------------------------------|-------|--------------------------|
|               |                     | Lect                           | Prac | Duration   Hrs.                    | Marks | Duration   Hrs.                  | Marks |                          |
| 201           | Maths – II          | 4                              | -    | 3                                  | 70    | 2                                | 30    | 100                      |
| 202           | “C” Programming     | 4                              | -    | 3                                  | 70    | 2                                | 30    | 100                      |
| 203           | DBMS – I            | 4                              | -    | 3                                  | 70    | 2                                | 30    | 100                      |
| 204           | Basic Electronics   | 4                              | -    | 3                                  | 70    | 2                                | 30    | 100                      |
| 205           | Business System – I | 4                              | -    | 3                                  | 70    | 2                                | 30    | 100                      |
| 206           | Practicals          |                                | 10   | 5                                  | 140   | 3                                | 60    | 200                      |
| <b>Total</b>  |                     | 30                             |      |                                    | 490   |                                  | 210   | 700                      |

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**Semester: 3**

| Paper Sr. No. | Paper Title                                 | Teaching Schedule (Hours/Week) |     |      | University Exam Theory / Practical Duration |       | Internal Exam Theory / Practical Duration |       | Total Theory / Practical |
|---------------|---|--------------------------------|-----|------|---|-------|---|-------|--------------------------|
|               |   | Lect                           | Tut | Prac | Hrs.  | Marks | Hrs.                                      | Marks |                          |
| 301           | Data Structures                             | 4                              | -   |      | 3   | 70    | 2   | 30    | 100                      |
| 302           | DBMS – II                                   | 4                              | -   |      | 3   | 70    | 2   | 30    | 100                      |
| 303           | Digital Electronics & Computer Architecture | 4                              | -   |      | 3   | 70    | 2   | 30    | 100                      |
| 304           | Computer Networks                           | 4                              | -   |      | 3   | 70    | 2   | 30    | 100                      |
| 305           | Business System – II                        | 4                              | -   |      | 3   | 70    | 2   | 30    | 100                      |
| 306           | Practicals                                  |                                |     | 10   | 5   | 140   | 3   | 60    | 200                      |
| <b>Total</b>  |   | 30                             |     |      |   | 490   |   | 210   | 700                      |

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**Semester: 4**

| Paper Sr. No. | Paper Title                        | Teaching Schedule (Hours/Week) |      | University Exam Theory / Practical Duration |       | Internal Exam Theory / Practical Duration |       | Total Theory / Practical |
|---------------|------------------------------------|--------------------------------|------|---|-------|---|-------|--------------------------|
|               |                                    | Lect                           | Prac | Hrs.  | Marks | Hrs.                                      | Marks |                          |
| 401           | VADT – I                           | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 402           | Object Oriented Programming        | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 403           | Microprocessor & Assembly Language | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 404           | Web Development Techniques         | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 405           | E-Business                         | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 406           | Practicals                         |                                | 10   | 5   | 140   | 3   | 60    | 200                      |
| <b>Total</b>  |                                    | 30                             |      |   | 490   |   | 210   | 700                      |

**VADT - Visual Application Development Technique**

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**Semester: 5**

| Paper Sr. No. | Paper Title                   | Teaching Schedule (Hours/Week) |      | University Exam Theory / Practical Duration |       | Internal Exam Theory / Practical Duration |       | Total Theory / Practical |
|---------------|-------------------------------|--------------------------------|------|---|-------|---|-------|--------------------------|
|               |                               | Lect                           | Prac | Hrs.  | Marks | Hrs.                                      | Marks |                          |
| 501           | VADT – II                     | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 502           | RDBMS                         | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 503           | Computer Graphics & Animation | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 504           | System Analysis & Design      | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 505           | Operating Systems             | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 506           | Practicals                    |                                | 10   | 5   | 140   | 3   | 60    | 200                      |
| <b>Total</b>  |                               | 30                             |      |   | 490   |   | 210   | 700                      |

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**M.Sc. (I.T.) [Five Years Integrated Course]**  
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**Semester: 6**

| Paper Sr. No. | Paper Title              | Teaching Schedule (Hours/Week) |      | University Exam Theory / Practical Duration |       | Internal Exam Theory / Practical Duration |       | Total Theory / Practical |
|---------------|--------------------------|--------------------------------|------|---|-------|---|-------|--------------------------|
|               |                          | Lect                           | Prac | Hrs.  | Marks | Hrs.                                      | Marks |                          |
| 601           | Web Programming          | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 602           | Unix & Shell Programming | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 603           | Database Administration  | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 604           | Project                  | -                              | 8    | -   | 140   | -   | 60    | 200                      |
| 606           | Practicals               |                                | 10   | 5   | 140   | 3   | 60    | 200                      |
| <b>Total</b>  |                          | 30                             |      |   | 490   |   | 210   | 700                      |

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**M.Sc. (I.T.) [Five Years Integrated Course]**  
**B.Sc. (Information Technology)**  
**Semester: 7**

| Paper Sr. No. | Paper Title          | Teaching Schedule (Hours/Week) |      | University Exam Theory / Practical Duration |       | Internal Exam Theory / Practical Duration |       | Total Theory / Practical |
|---------------|----------------------|--------------------------------|------|---|-------|---|-------|--------------------------|
|               |                      | Lect                           | Prac | Hrs.  | Marks | Hrs.                                      | Marks |                          |
| 701           | APE – I              | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 702           | APE – II             | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 703           | Software Engineering | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 704           | Operation Research   | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 705           | Seminars             | -                              | 2    | -   | 35    | -   | 15    | 50                       |
| 706           | Project              | -                              | 12   | -   | 140   | -   | 60    | 200                      |
| <b>Total</b>  |                      | 30                             |      |   | 455   |   | 195   | 650                      |

**APE – Advanced Programming Environment**

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**Semester: 8**

| Paper Sr. No. | Paper Title  | Teaching Schedule (Hours/Week) |      | University Exam Theory / Practical Duration |       | Internal Exam Theory / Practical Duration |       | Total Theory / Practical |
|---------------|--|--------------------------------|------|---|-------|---|-------|--------------------------|
|               |  | Lect                           | Prac | Hrs.  | Marks | Hrs.                                      | Marks |                          |
| 801           | WADT – I   | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 802           | WADT – II  | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 803           | EL – I<br>(i) MIS<br>(ii) DSS<br>(iii) Parallel Processing & Architecture                                    | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 804           | EL – II<br>(i) Information Security & Applications<br>(ii) Embedded Systems.<br>(iii) Distributed Computing. | 4                              | -    | 3   | 70    | 2   | 30    | 100                      |
| 805           | Seminars.  | -                              | 2    | -   | 35    | -   | 15    | 50                       |
| 806           | Project  | -                              | 12   | -   | 140   | -   | 60    | 200                      |
| <b>Total</b>  |  | 30                             |      |   | 455   |   | 195   | 650                      |

**WADT - Web Application Development Techniques**



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M.Sc. (I.T.) [Five Year Integrated Course]

**M.Sc. (Information Technology)**

**Teaching and Evaluation Scheme**

**Semester: 9**

| Paper Sr. No. | Paper Title   | Teaching Schedule (Hours/Week) |     |      | University Exam Theory / Practical Duration |       | Internal Exam Theory / Practical Duration |       | Total Theory / Practical |
|---------------|---|--------------------------------|-----|------|---|-------|---|-------|--------------------------|
|               |   | Lect                           | Tut | Prac | Hrs.  | Marks | Hrs.                                      | Marks |                          |
| 901           | Mobile Computing  | 3                              | 1   | -    | 3   | 70    | 2   | 30    | 100                      |
| 902           | Artificial Intelligence   | 3                              | 1   | -    | 3   | 70    | 2   | 30    | 100                      |
| 903           | EL – I<br>(i) Web Application Development Techniques - III<br>(ii) Advanced Computer Networks<br>(iii) IT & Cyber Low | 3                              | 1   | -    | 3   | 70    | 2   | 30    | 100                      |
| 904           | EL – II<br>(i) Data Warehousing<br>(ii) Language Processors<br>(iii) Algorithm Design and Analysis                    | 3                              | 1   | -    | 3   | 70    | 2   | 30    | 100                      |
| 906           | Project   | -                              | -   | 14   | -   | 140   | -   | 60    | 200                      |
| <b>Total</b>  |   | 30                             |     |      | 420   |       | 180                                       |       | 600                      |

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M.Sc. (I.T.) [Five Year Integrated Course]

**M.Sc. (Information Technology)**

**Teaching and Evaluation scheme**

**Semester: 10**

| Paper Sr. No. | Paper Title | Teaching Schedule (Hours/Week) |      | University Exam Theory / Practical Duration |       | Internal Exam Theory / Practical Duration |       | Total Theory / Practical |
|---------------|-------------|--------------------------------|------|---|-------|---|-------|--------------------------|
|               |             | Lect                           | Prac | Hrs.  | Marks | Hrs.                                      | Marks |                          |
| 1001          | Project     | -                              | 30   | -   | 420   | -   | 180   | 600                      |
| <b>Total</b>  |             | 30                             |      | 420   |       | 180                                       |       | 600                      |