## KADI SARVA VISHWAVIDYALAYA, GANDHINAGAR

### Bachelor of Information Technology Semester 3 Syllabus Structure

| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| CC 301 B | Discrete Mathematics | 3 | 2 | 0 | 5 | 5 | 3 | 70 | 30 | 20 | 0 | 120 |
| IT 302 | Linear Electronics | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 303 | Data Communication and Networking | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 304 | Data Structures and Algorithms | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 305 | Database Management Systems | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 306 | Object oriented Programming with C++ | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| Total | | 18 | 2 | 10 | 30 | 25 | 18 | 420 | 180 | 120 | 150 | 870 |

### Bachelor of Information Technology Semester 4 Syllabus Structure

| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| CC 401 B | Probability and Numerical Method | 3 | 1 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 402 | Computer Networking | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| CE 403/ IT 403 | Computer Organization and Architecture | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| CE 404/ IT 404 | Design and Analysis of Algorithms | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| CE 405/ IT 405 | Object Oriented Analysis and Design | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 406 | Enterprise Resource Planning | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| Total | | 19 | 1 | 10 | 30 | 25 | 18 | 420 | 180 | 120 | 150 | 870 |

### Bachelor of Information Technology Semester 5 Syllabus Structure

| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| CC 501 | Principles of Management | 2 | 0 | 0 | 2 | 2 | 3 | 70 | 30 | 20 | 0 | 120 |
| IT 502 | Information Security | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| CE 503 / IT 503 | Operating System | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 504 | Software Engineering | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| CE 505 / IT 505 | Object Oriented Programming with JAVA | 3 | 0 | 4 | 7 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 506 | Internet Technology | 2 | 0 | 4 | 6 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| Total | | 18 | 0 | 14 | 32 | 25 | 18 | 420 | 180 | 120 | 150 | 870 |

### Bachelor of Information Technology Semester 5 Syllabus Structure

| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| IT 601 | Mobile Computing | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| CE 602 / IT 602 | Artificial Intelligence | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 603 | Service Oriented Architecture | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| CE 604 / IT 604 | Theory of Computation | 3 | 0 | 0 | 3 | 3 | 3 | 70 | 30 | 20 | 0 | 120 |
| CE 605 / IT 605 | Department Elective-I | 3 | 0 | 4 | 7 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 606 | Department Elective-II | 3 | 0 | 4 | 7 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| Total | | 18 | 0 | 14 | 32 | 25 | 18 | 420 | 180 | 120 | 150 | 870 |

| Department Elective-I: | IT 605-1 Advanced Java Programming | | Department Elective-II | IT 606-1 Distributed System |
|---|---|---|---|---|
| | IT 605-2 Advance .Net Technology | | | IT 606-2 E-Commerce & E-Business |
| | IT 605-3 Python Programming | | | IT 606-3 Parallel Processing |
| | | | | IT 606-4 Optimization Techniques |

## Bachelor of Engineering Information Technology Semester 7 Syllabus Structure

| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| IT 701 | Big Data Analytics | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 702 | Data Compression | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 703 | Department Elective-I | 4 | 0 | 4 | 8 | 6 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 704 / CE 704 | Department Elective-II | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 705 / CE 705 | Mini Project | 0 | 0 | 6 | 6 | 3 | 0 | 0 | 0 | 50 | 100 | 150 |
| Total | | 16 | 0 | 16 | 32 | 24 | 12 | 280 | 120 | 130 | 220 | 750 |

| Department Elective-I: | IT 703-1 Computer Graphics | | Department Elective-II | IT 704-1 Image Processing |
|---|---|---|---|---|
| | IT 703-2 Mobile Application Development With Android | | | IT 704-2 Embedded Systems |
| | IT 703-3 Mobile Application Development With iOS | | | IT 704-3 Semantic Web |
| | | | | IT 704-4 Internet of Things |

## Bachelor of Engineering Information Technology Semester 8 Syllabus Structure

| Subject Code | Subject Name | Teaching Scheme | | | | Total Credit | Evaluation Scheme | | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L (Hrs) | T (Hrs) | P (Hrs) | TOTAL Hrs | | Theory Hrs | Marks | IE Marks | CIA Marks | Practical / Viva Marks | |
| IT 801 | Wireless Communication | 4 | 0 | 2 | 6 | 5 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 802 / CE 802 | Department Elective-I | 3 | 0 | 2 | 5 | 4 | 3 | 70 | 30 | 20 | 30 | 150 |
| IT 803 / CE 803 | Project | 0 | 0 | 34 | 34 | 17 | 0 | 0 | 0 | 300 | 300 | 600 |
| Total | | 7 | 0 | 38 | 45 | 26 | 6 | 140 | 60 | 340 | 360 | 900 |

| Department Elective-I: | IT 802-1 Information Retrieval |
|---|---|
| | IT 802-2 High Perfomance Computing |
| | IT 802-3 Soft Computing |