ANNA UNIVERSITY CHENNAI:: CHENNAI 600 025 CURRICULUM 2004 B.E. COMPUTER SCIENCE AND ENGINEERING

SEMESTER III

(Applicable to the students admitted from the Academic year 2006 - 2007 onwards)

| Code No. | Course Title | L | Т | Р | M |
|-----------|---------------------------------------|---|---|---|-----|
| THEORY | 1 | | | | |
| MA1201 | Mathematics III | 3 | 1 | 0 | 100 |
| CS1151 | Data Structures | 3 | 1 | 0 | 100 |
| CS1202 | Digital Principles and Systems Design | 3 | 1 | 0 | 100 |
| CS1203 | System Software | 3 | 0 | 0 | 100 |
| CS1204 | Object Oriented Programming | 3 | 0 | 0 | 100 |
| CY1201 | Environmental Science and Engineering | 3 | 0 | 0 | 100 |
| PRACTICAL | | | | | |
| CS1205 | Object Oriented Programming Lab | 0 | 0 | 3 | 100 |
| CS1206 | Digital Lab | 0 | 0 | 3 | 100 |
| CS1152 | Data Structures Lab | 0 | 0 | 3 | 100 |

SEMESTER IV

(Applicable to the students admitted from the Academic year 2006 - 2007 onwards)

| Code No. | Course Title | L | Т | Р | М |
|-----------|-----------------------------------|---|---|---|-----|
| THEORY | | | | | |
| MA1252 | Probability and Queuing Theory | 3 | 1 | 0 | 100 |
| CS1201 | Design and Analysis of Algorithms | 3 | 1 | 0 | 100 |
| EC1291 | Analog and Digital Communication | 3 | 1 | 0 | 100 |
| CS1251 | Computer Architecture | 3 | 1 | 0 | 100 |
| CS1252 | Operating Systems | 3 | 0 | 0 | 100 |
| CS1253 | Visual Programming | 3 | 0 | 0 | 100 |
| PRACTICAL | | | | | |
| CS1207 | System Software Lab | 0 | 0 | 3 | 100 |
| CS1254 | Operating Systems Lab | 0 | 0 | 3 | 100 |
| CS1255 | Visual Programming Lab | 0 | 0 | 3 | 100 |

SEMESTER V

(Applicable to the students admitted from the Academic year 2006 - 2007 onwards)

| Code No. | Course Title | L | Т | Ρ | М | | |
|-----------|---|---|---|---|-----|--|--|
| THEORY | | • | • | | | | |
| MG1351 | Principles of Management | 3 | 0 | 0 | 100 | | |
| MA1256 | Discrete Mathematics | 3 | 1 | 0 | 100 | | |
| CS1301 | Database Management Systems | 3 | 1 | 0 | 100 | | |
| CS1302 | Computer Networks | 3 | 0 | 0 | 100 | | |
| CS1303 | Theory of Computation | 3 | 1 | 0 | 100 | | |
| CS1304 | Microprocessors & Micro controllers | 3 | 1 | 0 | 100 | | |
| GE1302 | Technical Seminar * | 0 | 0 | 3 | 0 | | |
| PRACTICAL | | | | | | | |
| CS1305 | Network Lab | 0 | 0 | 3 | 100 | | |
| CS1306 | Microprocessors & Micro controllers Lab | 0 | 0 | 3 | 100 | | |
| CS1307 | DBMS Lab | 0 | 0 | 3 | 100 | | |

* Offered in V semester for B.E. (CSE), B.E. (ECE) & B.E. (Mech.) only.

SEMESTER VI

| (Applicable to the students admitted from the Academic year 2006 – 2007 onwar |
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| Code No. | Course Title | L | Т | Р | Μ |
|-----------|------------------------------------|---|---|---|-----|
| THEORY | | | 1 | | |
| CS1351 | Artificial Intelligence | 3 | 0 | 0 | 100 |
| CS1352 | Principles of Compiler Design | 3 | 1 | 0 | 100 |
| CS1353 | Software Engineering | 3 | 0 | 0 | 100 |
| CS1354 | Graphics and Multimedia | 3 | 0 | 0 | 100 |
| MA1251 | Numerical Methods | 3 | 1 | 0 | 100 |
| | Elective – I | 3 | 0 | 0 | 100 |
| GE1352 | Communication Skills Laboratory ** | 0 | 0 | 4 | 100 |
| PRACTICAL | | | | | |
| CS1355 | Graphics and Multimedia Lab | 0 | 0 | 3 | 100 |
| CS1356 | Compiler Design Lab | 0 | 0 | 3 | 100 |

** Offered in VI semester for B.E. (CSE), B.E. (ECE) & B.E. (Mech.) only.

SEMESTER VII

| (Applicable to the students admitted from the Academic year 2006 – 2007 onwards) | | | | | | | |
|--|-------------------------------------|---|---|---|-----|--|--|
| Code No. | Course Title | L | Т | Ρ | М | | |
| THEORY | | | | | | | |
| | Elective – II | 3 | 0 | 0 | 100 | | |
| CS1401 | Internet Programming | 3 | 0 | 0 | 100 | | |
| CS1402 | Object Oriented Analysis and Design | 3 | 1 | 0 | 100 | | |
| IT1252 | Digital Signal Processing | 3 | 1 | 0 | 100 | | |
| | Elective III | 3 | 0 | 0 | 100 | | |
| | Elective IV | 3 | 0 | 0 | 100 | | |
| PRACTICAL | | | | | | | |
| CS1403 | Case Tools Lab | 0 | 0 | 3 | 100 | | |
| CS1404 | Internet Programming Lab | 0 | 0 | 3 | 100 | | |

SEMESTER VIII

(Applicable to the students admitted from the Academic year 2006 – 2007 onwards)

| Code No. | Course Title | L | Т | Р | М |
|-----------|------------------|---|---|----|-----|
| THEORY | | • | • | | |
| IT1402 | Mobile Computing | 3 | 0 | 0 | 100 |
| | Elective V | 3 | 0 | 0 | 100 |
| | Elective VI | 3 | 0 | 0 | 100 |
| PRACTICAL | | | | | |
| CS1451 | Project Work | 0 | 0 | 12 | 200 |
| CS1452 | Comprehension | 0 | 0 | 2 | - |

LIST OF ELECTIVES FOR B.E. COMPUTER SCIENCE AND ENGINEERING

SEMESTER VI

| Code No. | Course Title | L | Т | Р | М |
|----------|----------------------------------|---|---|---|-----|
| CS1001 | Resource Management Techniques | 3 | 0 | 0 | 100 |
| CS1002 | UNIX Internals | 3 | 0 | 0 | 100 |
| CS1003 | High Performance Microprocessors | 3 | 0 | 0 | 100 |
| CS1004 | Data Warehousing and Mining | 3 | 0 | 0 | 100 |
| CS1005 | Advanced JAVA Programming | 3 | 0 | 0 | 100 |
| IT1353 | Embedded Systems | 3 | 0 | 0 | 100 |
| CS1006 | Advanced Databases | 3 | 0 | 0 | 100 |
| GE1001 | Intellectual Property Rights | 3 | 0 | 0 | 100 |
| GE1002 | Indian Constitution and Society | 3 | 0 | 0 | 100 |

SEMESTER VII

| Code No. | Course Title | L | Т | Р | М |
|----------|-----------------------------------|---|---|---|-----|
| CS1007 | Advanced Operating Systems | 3 | 0 | 0 | 100 |
| CS1008 | Real Time Systems | 3 | 0 | 0 | 100 |
| CS1009 | TCP/IP Design and Implementation | 3 | 0 | 0 | 100 |
| CS1010 | C# and .NET Framework | 3 | 0 | 0 | 100 |
| CS1011 | Systems Modelling & Simulation | 3 | 0 | 0 | 100 |
| IT1352 | Cryptography and Network Security | 3 | 1 | 0 | 100 |
| CS1012 | Natural Language Processing | 3 | 0 | 0 | 100 |
| CS1013 | Advanced Computer Architecture | 3 | 0 | 0 | 100 |
| CS1014 | Information Security | 3 | 0 | 0 | 100 |
| CS1015 | User Interface Design | 3 | 0 | 0 | 100 |
| CS1016 | Graph Theory | 3 | 0 | 0 | 100 |
| MG1401 | Total Quality Management | 3 | 0 | 0 | 100 |

SEMESTER VIII

| Code No. | Course Title | L | Т | Р | М |
|----------|--|---|---|---|-----|
| CS1017 | Parallel Computing | 3 | 0 | 0 | 100 |
| CS1018 | Soft Computing | 3 | 0 | 0 | 100 |
| EC1008 | High Speed Networks | 3 | 0 | 0 | 100 |
| EC1009 | Digital Image Processing | 3 | 0 | 0 | 100 |
| CS1019 | Robotics | 3 | 0 | 0 | 100 |
| IT1401 | Component Based Technology | 3 | 0 | 0 | 100 |
| CS1020 | Software Quality Management | 3 | 0 | 0 | 100 |
| CS1021 | Quantum Computing | 3 | 0 | 0 | 100 |
| CS1022 | Knowledge Based Decision Support Systems | 3 | 0 | 0 | 100 |
| IT1012 | Grid Computing | 3 | 0 | 0 | 100 |
| GE1301 | Professional Ethics and Human Values | 3 | 0 | 0 | 100 |