AFFILIATED INSTITUTIONS ANNA UNIVERSITY, CHENNAI

REGULATIONS – 2013

M.E. EMBEDDED SYSTEM TECHNOLOGIES I TO VI SEMESTERS (PART - TIME) CURRICULUM

SEMESTER I

| SI.No | CODE | COURSE TITILE | L | Т | Р | С | | |
|--------|--------|--|---|---|---|----|--|--|
| THEORY | | | | | | | | |
| 1 | MA7163 | Applied Mathematics for Electrical Engineers | 3 | 1 | 0 | 4 | | |
| 2 | ET7101 | Advanced Digital System Design | 3 | 0 | 0 | 3 | | |
| 3 | ET7103 | Real Time Systems | 3 | 0 | 0 | 3 | | |
| | | TOTAL | 9 | 1 | 0 | 10 | | |

SEMESTER II

| SI.No | CODE | COURSE TITILE | L | Т | Р | С | | | |
|--------|--------|--|---|---|---|----|--|--|--|
| THEORY | | | | | | | | | |
| 1 | ET7201 | VLSI Architecture and Design Methodologies | 3 | 0 | 0 | 3 | | | |
| 2 | ET7202 | Embedded Networking | 3 | 1 | 0 | 4 | | | |
| 3 | ET7204 | Software for Embedded Systems | 3 | 0 | 0 | 3 | | | |
| | | TOTAL | 9 | 1 | 0 | 10 | | | |

SEMESTER III

| SI.No | CODE | COURSE TITILE | | L | Т | Р | С | | | |
|-------|-----------|-------------------------------------|-------|---|---|---|----|--|--|--|
| THEC | THEORY | | | | | | | | | |
| 1 | ET7102 | Microcontroller Based System Design | | 3 | 0 | 0 | 3 | | | |
| 2 | ET7104 | Design of Embedded Systems | | 3 | 0 | 0 | 3 | | | |
| 3 | | Elective - I | | 3 | 0 | 0 | 3 | | | |
| PRAC | PRACTICAL | | | | | | | | | |
| 4 | ET7111 | Embedded System Laboratory I | | 0 | 0 | 3 | 2 | | | |
| | | | TOTAL | 9 | 0 | 3 | 11 | | | |

SEMESTER IV

| SI.No | CODE | COURSE TITILE | L | Т | Р | С | | | | |
|-------|-----------|-----------------------------------|---|---|---|----|--|--|--|--|
| THEO | THEORY | | | | | | | | | |
| 1 | ET7203 | Wireless and Mobile Communication | 3 | 0 | 0 | 3 | | | | |
| 2 | | Elective - II | 3 | 0 | 0 | 3 | | | | |
| 3 | | Elective - III | 3 | 0 | 0 | 3 | | | | |
| PRAC | PRACTICAL | | | | | | | | | |
| 4 | ET7211 | Embedded System Laboratory II | 0 | 0 | 3 | 2 | | | | |
| | | TOTAL | 9 | 0 | 3 | 11 | | | | |

SEMESTER V

| SI.No | CODE | COURSE TITILE | L | Т | Р | С | | | |
|-------|-----------|------------------------|---|---|----|----|--|--|--|
| THEO | RY | | | | | | | | |
| 1 | | Elective – IV | 3 | 0 | 0 | 3 | | | |
| 2 | | Elective – V | 3 | 0 | 0 | 3 | | | |
| 3 | | Elective – VI | 3 | 0 | 0 | 3 | | | |
| PRAC | PRACTICAL | | | | | | | | |
| 4 | ET7311 | Project Work (Phase I) | 0 | 0 | 12 | 6 | | | |
| | | TOTAL | 9 | 0 | 12 | 15 | | | |

SEMESTER VI

| SI.No | CODE | COURSE TITILE | L | Т | Р | С | |
|--------|--------|-------------------------|---|---|----|----|--|
| THEORY | | | | | | | |
| 1 | ET7411 | Project Work (Phase II) | 0 | 0 | 24 | 12 | |
| | | TOTAL | 0 | 0 | 24 | 12 | |

TOTAL NUMBER OF CREDITS = 69

ELECTIVES FOR M.E. EMBEDDED SYSTEM TECHNOLOGIES

ELECTIVE I

| SI. | CODE | COURSE TITILE | L | Т | Р | С | | | |
|-----|--------|----------------------------------|---|---|---|---|--|--|--|
| No | | | | | | | | | |
| THE | THEORY | | | | | | | | |
| 1 | ET7001 | Digital Instrumentation | 3 | 0 | 0 | 3 | | | |
| 2 | ET7002 | Real Time Operating Systems | 3 | 0 | 0 | 3 | | | |
| 3 | ET7016 | Parallel Processing Architecture | 3 | 0 | 0 | 3 | | | |

ELECTIVE II & III

| 4 | ET7003 | Design of Embedded Control Systems | 3 | 0 | 0 | 3 |
|---|--------|---|---|---|---|---|
| 5 | ET7004 | Programming with VHDL | 3 | 0 | 0 | 3 |
| 6 | ET7005 | Adhoc Networks | 3 | 0 | 0 | 3 |
| 7 | ET7006 | Advanced Digital Signal Processing | 3 | 0 | 0 | 3 |
| 8 | CL7204 | Soft Computing Techniques | 3 | 0 | 0 | 3 |
| 9 | ET7007 | RISC Processor Architecture and Programming | 3 | 0 | 0 | 3 |

ELECTIVE IV,V&VI

| 10 | ET7008 | Advanced Embedded Systems | 3 | 0 | 0 | 3 |
|----|--------|--|---|---|---|---|
| 11 | ET7009 | Pervasive Devices and Technology | 3 | 0 | 0 | 3 |
| 12 | ET7010 | Cryptography and Network Security | 3 | 0 | 0 | 3 |
| 13 | ET7011 | Smart Meter and Smart Grid Communication | 3 | 0 | 0 | 3 |
| 14 | ET7012 | Computer in Networking and Digital Control | 3 | 0 | 0 | 3 |
| 15 | ET7013 | Distributed Embedded Computing | 3 | 0 | 0 | 3 |
| 16 | CL7004 | Robotics and Control | 3 | 0 | 0 | 3 |
| 17 | ET7014 | Application of MEMS Technology | 3 | 0 | 0 | 3 |
| 18 | ET7015 | Digital Image Processing and Applications | 3 | 0 | 0 | 3 |
| | | | | | | |