

ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT
B.E. – ELECTRONICS AND COMPUTER ENGINEERING
2019

SEMESTER-I

| Sr. No. | Course No. | TITLE | L | T | P | Cr |
|--------------|------------|------------------------|-----------|----------|----------|-----------|
| 1 | UPH004 | APPLIED PHYSICS | 3 | 1 | 2 | 4.5 |
| 2 | UTA009 | COMPUTER PROGRAMMING | 3 | 0 | 2 | 4 |
| 3 | UEN002 | ENERGY & ENVIRONMENT | 3 | 0 | 0 | 3 |
| 4 | UES009 | MECHANICS | 2 | 1 | 2* | 2.5 |
| 5 | UEE001 | ELECTRICAL ENGINEERING | 3 | 1 | 2 | 4.5 |
| 6 | UMA004 | MATHEMATICS-I | 3 | 1 | 0 | 3.5 |
| 7 | | ELC-I | | | | 0 |
| TOTAL | | | 17 | 4 | 6 | 22 |

* Each student will attend one Lab Session of 2 hrs in a semester for a bridge project in this course. (Mechanics)

SEMESTER-II

| Sr. No. | Course No. | TITLE | L | T | P | Cr |
|--------------|------------|-----------------------------|-----------|----------|----------|-------------|
| 1 | UCB008 | APPLIED CHEMISTRY | 3 | 1 | 2 | 4.5 |
| 2 | UTA007 | OBJECT ORIENTED PROGRAMMING | 3 | 0 | 2 | 4 |
| 3 | UEC001 | ELECTRONIC ENGINEERING | 3 | 1 | 2 | 4.5 |
| 4 | UTA015 | ENGINEERING DRAWING | 2 | 4 | 0 | 4 |
| 5 | UMA003 | MATHEMATICS-II | 3 | 1 | 0 | 3.5 |
| 6 | UHU003 | PROFESSIONAL COMMUNICATION | 2 | 0 | 2 | 3 |
| 7 | | ELC-II | | | | 0 |
| TOTAL | | | 16 | 7 | 8 | 23.5 |

SEMESTER-III

| Sr. No. | Course No. | TITLE | L | T | P | Cr |
|--------------|------------|--------------------------------------|-----------|----------|-----------|-------------|
| 1 | UES012 | ENGINEERING MATERIALS | 3 | 1 | 2 | 4.5 |
| 2 | UMA*** | NUMERICAL ANALYSIS | 3 | 1 | 2 | 4.5 |
| 3 | UEC*** | DATA STRUCTURES | 3 | 0 | 2 | 4.0 |
| 4 | UEC*** | INFORMATION AND COMMUNICATION THEORY | 3 | 1 | 0 | 3.5 |
| 5 | UEC*** | ANALOG ELECTRONIC CIRCUITS | 3 | 0 | 2 | 4 |
| 6 | UEC*** | DIGITAL SYSTEM DESIGN | 2 | 0 | 2 | 3 |
| 7 | UTA013 | ENGINEERING DESIGN PROJECT – I | 1 | 0 | 2 | 4 |
| 8 | | ELC-III | | | | 0 |
| TOTAL | | | 18 | 3 | 12 | 27.5 |

SEMESTER-IV

| Sr. No. | Course No. | TITLE | L | T | P | Cr |
|--------------|------------|-------------------------------|-----------|----------|-----------|-------------|
| 1 | UTA002 | MANUFACTURING PROCESSES | 0 | 0 | 3 | 1.5 |
| 2 | UMA031 | OPTIMIZATION TECHNIQUES | 3 | 1 | 0 | 3.5 |
| 3 | UEC*** | COMMUNICATION SYSTEMS | 3 | 0 | 2 | 4 |
| 4 | UEC404 | SIGNALS AND SYSTEMS | 3 | 1 | 2 | 4.5 |
| 5 | UEC608 | EMBEDDED SYSTEMS | 3 | 0 | 2 | 4 |
| 6 | UEC*** | OPERATING SYSTEMS | 3 | 0 | 2 | 4 |
| 7 | UTA014 | ENGINEERING DESIGN PROJECT-II | 1 | 0 | 4 | 4 |
| 8 | | ELC-IV | | | | 0 |
| TOTAL | | | 16 | 2 | 15 | 25.5 |

SEMESTER-V

| Sr. No. | Course No. | TITLE | L | T | P | Cr |
|--------------|------------|--|-----------|----------|-----------|-----------|
| 1 | UCS*** | SOFTWARE ENGINEERING | 3 | 0 | 2 | 4 |
| 2 | UEC*** | DATA COMMUNICATION AND COMPUTER NETWORKS | 3 | 0 | 2 | 4 |
| 3 | UEC*** | ALGORITHM ANALYSIS AND DESIGN | 3 | 0 | 2 | 4 |
| 4 | UEC*** | DIGITAL SIGNAL PROCESSING | 3 | 0 | 2 | 4 |
| 5 | UEC*** | COMPUTER ARCHITECTURE | 3 | 0 | 0 | 3 |
| 6 | UCS*** | DATABASE MANAGEMENT SYSTEMS | 3 | 0 | 2 | 4 |
| 7 | | ELC-V | | | | 0 |
| TOTAL | | | 18 | 0 | 10 | 23 |

SEMESTER-VI

| Sr. No. | Course No. | TITLE | L | T | P | Cr |
|--------------|------------|---|-----------|----------|-----------|-----------|
| 1 | UTA012 | INNOVATION AND ENTREPRENEURSHIP (2 Self Effort Hours) | 1 | 0 | 2 | 4 |
| 2 | UEC797 | CAPSTONE PROJECT (STARTS) | - | - | - | 0 |
| 3 | UEC*** | MOS CIRCUIT DESIGN | 2 | 0 | 2 | 3 |
| 4 | UEC*** | MACHINE LEARNING | 3 | 0 | 2 | 4 |
| 5 | | ELECTIVE –I | 3 | 0 | 2 | 4 |
| 6 | | ELECTIVE –II | 3 | 0 | 2 | 4 |
| 7 | | GENERIC ELECTIVE-I | 2 | 0 | 0 | 2 |
| 8 | | ELC-VI | | | | 0 |
| TOTAL | | | 14 | 0 | 10 | 21 |

SEMESTER-VII

| Sr. No. | Course No. | TITLE | L | T | P | Cr |
|--------------|------------|------------------------------|-----------|----------|-----------|-----------|
| 1 | UEC*** | WIRELESS AND MOBILE NETWORKS | 2 | 0 | 2 | 3 |
| 1 | UEC*** | IOT BASED SYSTEMS | 2 | 0 | 2 | 3 |
| 2 | UHU005 | HUMANITIES FOR ENGINEERS | 2 | 0 | 2 | 3 |
| 3 | | ELECTIVE –III | 3 | 0 | 0 | 3 |
| 4 | | ELECTIVE –IV | 3 | 0 | 0 | 3 |
| 5 | | GENERIC ELECTIVE-II | 1 | 0 | 2 | 2 |
| 6 | UEC797 | CAPSTONE PROJECT | 0 | 0 | 2 | 8 |
| TOTAL | | | 13 | 0 | 10 | 25 |

SEMESTER-VIII

| Sr. No. | Course No. | TITLE | L | T | P | Cr |
|--------------|------------|-------------------|---|---|---|-----------|
| 1 | UEC892 | PROJECT SEMESTER | | | | 15 |
| OR | | | | | | |
| 1 | | ELECTIVE –V | 3 | 0 | 0 | 3 |
| 2 | | ELECTIVE –VI | 3 | 0 | 0 | 3 |
| 3 | UEC894 | PROJECT | | | | 9 |
| OR | | | | | | |
| 1 | UEC*** | START-UP SEMESTER | 0 | 0 | 0 | 15 |
| TOTAL | | | | | | 15 |

Elective-I

| S. N. | Course No. | Course Name | L | T | P | Cr. |
|-------|------------|---|---|---|---|-----|
| 1 | UCS*** | NETWORK SECURITY | 3 | 0 | 2 | 4 |
| 2 | UEC*** | LINEAR INTEGRATED CIRCUITS AND APPLICATIONS | 3 | 0 | 2 | 4 |
| 3 | UEC*** | FIBER OPTIC COMMUNICATION | 3 | 0 | 2 | 4 |
| 4 | UEC*** | DEEP LEARNING | 3 | 0 | 2 | 4 |
| 5 | UEC855 | AUDIO & SPEECH PROCESSING | 3 | 0 | 2 | 4 |

Elective-II

| S. N. | Course No. | Course Name | L | T | P | Cr. |
|-------|------------|--|---|---|---|-----|
| 1 | UEC*** | VIRTUAL AND AUGMENTED REALITY | 3 | 0 | 2 | 4 |
| 2 | UEC*** | IMAGE PROCESSING | 3 | 0 | 2 | 4 |
| 3 | UCS*** | CYBER SECURITY | 3 | 0 | 2 | 4 |
| 4 | UEC*** | NETWORK VIRTUALIZATION AND SOFTWARE DEFINED NETWORKING | 3 | 0 | 2 | 4 |
| 5 | UEC*** | CRYPTOGRAPHY | 3 | 0 | 2 | 4 |

Elective-III

| S. N. | Course No. | Course Name | L | T | P | Cr. |
|-------|------------|-------------------------------|---|---|---|-----|
| 1 | UEC*** | GRAPHICS AND VISUAL COMPUTING | 3 | 0 | 0 | 3 |
| 2 | UEC704 | SOFT COMPUTING | 3 | 0 | 0 | 3 |
| 3 | UEC*** | COMPUTER VISION | 2 | 0 | 2 | 3 |
| 4 | UEC*** | MODERN CONTROL THEORY | 3 | 0 | 0 | 3 |
| 5 | UEC748 | VIDEO SIGNAL PROCESSING | 2 | 0 | 2 | 3 |

Elective-IV

| S. N. | Course No. | Course Name | L | T | P | Cr. |
|-------|------------|--|---|---|---|-----|
| 1 | UEC*** | PARALLEL & DISTRIBUTED COMPUTING | 3 | 0 | 0 | 3 |
| 2 | UEC*** | BLOCKCHAIN TECHNOLOGY | 2 | 0 | 2 | 3 |
| 3 | U***** | QUANTUM COMPUTING | 3 | 0 | 0 | 3 |
| 4 | UEC*** | BIG DATA ANALYTICS | 2 | 0 | 2 | 3 |
| 5 | UEC*** | ELCTROMAGNETIC FIELD THEORY AND TRANSMISSION LINES | 3 | 0 | 0 | 3 |
| 6 | UEC*** | VLSI SIGNAL PROCESSING | 3 | 0 | 0 | 3 |

Elective-V

| S. N. | Course No. | Course Name | L | T | P | Cr. |
|-------|------------|---------------------------------|---|---|---|-----|
| 1 | UEC863 | VLSI INTERCONNECT | 3 | 0 | 0 | 3 |
| 2 | UEC742 | MEMS | 3 | 0 | 0 | 3 |
| 3 | UEC862 | IC FABRICATION | 3 | 0 | 0 | 3 |
| 4 | UEC*** | WEB DESIGNING USING JAVA SCRIPT | 3 | 0 | 0 | 3 |

Elective-VI

| S. N. | Course No. | Course Name | L | T | P | Cr. |
|-------|------------|-------------------------------------|---|---|---|-----|
| 1 | UEC854 | ASIC and FPGA | 3 | 0 | 0 | 3 |
| 2 | UEC622 | DSP PROCESSORS | 2 | 0 | 2 | 3 |
| 3 | UEC*** | VIRTUAL INSTRUMENTATION ENGINEERING | 2 | 0 | 2 | 3 |
| 4 | UEC*** | HTML AND PHP PROGRAMMING | 3 | 0 | 0 | 3 |

Total Credits: 182.5