

SCHEME OF EXAMINATION

| Subject Code | Subject | Hrs of Instruction | Exam Duration (Hrs) | Maximum Marks | | | Credit Points |
|--|--|--------------------|---------------------|---------------|----|-------|---------------|
| | | | | CA | CE | Total | |
| First Semester | | | | | | | |
| Part - I | | | | | | | |
| 18UTALA101/ 18UHILA101/ 18UFRLA101 | Tamil-I / Hindi-I/ French-I/ | 5 | 3 | 25 | 75 | 100 | 3 |
| Part - II | | | | | | | |
| 18UENLA101 | Foundation English-I | 5 | 3 | 25 | 75 | 100 | 3 |
| Part - III | | | | | | | |
| 18UECM101 | Core I: Physics of Semiconductor Devices | 4 | 3 | 25 | 75 | 100 | 4 |
| 18UECM102 | Core II: Digital Electronics | 4 | 3 | 25 | 75 | 100 | 4 |
| 18UMAECA101 | Allied I: Algebra and Calculus | 5 | 3 | 25 | 75 | 100 | 4 |
| 18UECMP101 | Core Practical -I: Semiconductor Devices Lab | 3 | 3 | 40 | 60 | 100 | 2 |
| 18UECMP102 | Core Practical -II: Digital Electronics Lab | 2 | 3 | 40 | 60 | 100 | 2 |
| Part - IV | | | | | | | |
| 18UVE101 | Value Education I: Yoga | 2 | 3 | 25 | 75 | 100 | 2 |
| TOTAL | | 30 | | 800 | | | 24 |
| Second Semester | | | | | | | |
| Part - I | | | | | | | |
| 18UTALA201/ 18UHILA201/ 18UFRLA201 | Tamil-II/ Hindi-II/ French-II | 5 | 3 | 25 | 75 | 100 | 3 |
| Part - II | | | | | | | |
| 18UENLA201 | Foundation English-II | 5 | 3 | 25 | 75 | 100 | 3 |
| Part - III | | | | | | | |
| 18UECM201 | Core III: Electronic Circuits | 4 | 3 | 25 | 75 | 100 | 4 |
| 18UECM202 | Core IV: Principles of Communication Systems | 4 | 3 | 25 | 75 | 100 | 4 |
| 18UMAECA201 | Allied II : Numerical Methods | 5 | 3 | 25 | 75 | 100 | 4 |
| 18UECMP201 | Core Practical-III: Electronic Circuits Lab | 3 | 3 | 40 | 60 | 100 | 2 |

B.Sc., Electronics and Communication (Students admitted from 2018-2019 onwards)

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| | | | | CA | CE | Total | |
| 18UECMP202 | Core Practical IV: Communication Lab | 2 | 3 | 40 | 60 | 100 | 2 |
| Part - IV | | | | | | | |
| 18UVE201 | Value Education II: Environmental Studies | 2 | 3 | 25 | 75 | 100 | 2 |
| TOTAL | | 30 | | 800 | | | 24 |
| Third Semester | | | | | | | |
| Part - I | | | | | | | |
| 18UTALA301/ 18UHILA301/ 18UFRLA301 | Tamil-III / Hindi-III/ French-III | 5 | 3 | 25 | 75 | 100 | 3 |
| Part - II | | | | | | | |
| 18UENLA301 | Foundation English-III | 5 | 3 | 25 | 75 | 100 | 3 |
| Part - III | | | | | | | |
| 18UECM301 | Core V: Microprocessor and Interfacing | 4 | 3 | 25 | 75 | 100 | 4 |
| 18UCSECA301 | Allied III: Programming in C | 4 | 3 | 25 | 75 | 100 | 2 |
| 18UECMP301 | Core Practical -IV: Microprocessor and Interfacing Lab | 3 | 3 | 40 | 60 | 100 | 2 |
| 18UCSECAP301 | Allied Practical -I: Programming in C | 2 | 3 | 40 | 60 | 100 | 2 |
| Part - IV | | | | | | | |
| 18UECSBC301 | SBC I: PCB Design and Circuit Simulation Lab | 2 | 3 | 40 | 60 | 100 | 2 |
| | NMEC -I | 2 | 3 | 25 | 75 | 100 | 2 |
| 18ULS301 | Career Competency Skills I | 1 | - | - | - | - | - |
| | Add on Course - I | 2 | 3 | - | 100 | 100 | - |
| TOTAL | | 30 | | 800 | | | 20 |
| Fourth Semester | | | | | | | |
| Part - I | | | | | | | |
| 18UTALA401/ 18UHILA401/ | Tamil-IV / Hindi-IV/ | 5 | 3 | 25 | 75 | 100 | 3 |

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|-----------------------|---|--------------------|---------------------|---------------|----|-------|---------------|
| | | | | CA | CE | Total | |
| 18UFRLA401 | French-IV | | | | | | |
| Part - II | | | | | | | |
| 18UENLA401 | Foundation English-IV | 5 | 3 | 25 | 75 | 100 | 3 |
| Part - III | | | | | | | |
| 18UECM401 | Core VI: ICs and Applications | 4 | 3 | 25 | 75 | 100 | 4 |
| 18UCSECA401 | Allied IV : Programming in JAVA | 4 | 3 | 25 | 75 | 100 | 2 |
| 18UECMP401 | Core Practical -VI: ICs and Applications Lab | 3 | 3 | 40 | 60 | 100 | 2 |
| 18UCSECAP401 | Allied Practical -II: Programming in JAVA | 2 | 3 | 40 | 60 | 100 | 2 |
| Part - IV | | | | | | | |
| 18UECSBC401 | SBC II: Consumer Electronics (100% Internal Evaluation) | 2 | 3 | 100 | - | 100 | 2 |
| | NMEC -II | 2 | 3 | 25 | 75 | 100 | 2 |
| 18ULS401 | Career Competency Skills II | 1 | - | - | - | - | - |
| | Add on Course - II | 2 | 3 | - | - | - | - |
| | Advanced Learners Course | - | 3 | - | - | - | 2* |
| TOTAL | | 30 | | 800 | | | 20 |
| FIFTH SEMESTER | | | | | | | |
| PART-III | | | | | | | |
| 18UECM501 | Core VII: Computer Networks | 5 | 3 | 25 | 75 | 100 | 5 |
| 18UECM502 | Core VIII: Embedded Systems | 5 | 3 | 25 | 75 | 100 | 5 |
| 18UECM503 | Core IX: Arduino and Internet of Things | 5 | 3 | 25 | 75 | 100 | 4 |
| | Elective | 5 | 3 | 25 | 75 | 100 | 4 |
| 18UECMP501 | Core Practical VII: Embedded Systems Lab | 3 | 3 | 40 | 60 | 100 | 2 |
| 18UECMP502 | Core Practical - VIII: Internet of Things Lab | 3 | 3 | 40 | 60 | 100 | 2 |
| PART-IV | | | | | | | |

B.Sc., Electronics and Communication (Students admitted from 2018-2019 onwards)

| Subject Code | Subject | Hrs of Instruction | Exam Duration (Hrs) | Maximum Marks | | | Credit Points |
|-----------------------|---|--------------------|---------------------|---------------|----|-------------|---------------|
| | | | | CA | CE | Total | |
| 18UECSB501 | SBC III: Electronic Media | 3 | 3 | 25 | 75 | 100 | 2 |
| 18ULS501 | Career Competency Skills III | 1 | - | - | - | - | - |
| | Advanced Learners Course | - | 3 | - | - | - | 2* |
| PART-V | | | | | | | |
| 18UE501 | Extension Activity | - | - | - | - | - | 2 |
| TOTAL | | 30 | | | | 700 | 26 |
| SIXTH SEMESTER | | | | | | | |
| PART-III | | | | | | | |
| 18UECM601 | Core X: Mobile and Cellular Communication | 5 | 3 | 25 | 75 | 100 | 5 |
| 18UECM602 | Core XI: VLSI Design and VHDL | 5 | 3 | 25 | 75 | 100 | 5 |
| 18UECM603 | Core XII: Biomedical Instrumentation | 5 | 3 | 25 | 75 | 100 | 4 |
| | Elective | 5 | 3 | 25 | 75 | 100 | 4 |
| 18UECMP601 | Core Practical -IX: VHDL Programming & Simulation Lab | 3 | 3 | 40 | 60 | 100 | 2 |
| 18UECMP602 | Project Viva voce | 3 | - | 40 | 60 | 100 | 4 |
| PART-IV | | | | | | | |
| 18UECSB601 | SBC -IV: PLC and SCADA | 3 | 3 | 25 | 75 | 100 | 2 |
| 18ULS601 | Career Competency Skills IV | 1 | - | - | - | - | - |
| TOTAL | | 30 | | | | 700 | 26 |
| Grand Total | | | | | | 4600 | 140 |

Advanced Learners Course

*The department offers the following two subjects as **Advanced Learners Course** in fifth semester. Extra two credits will be given if student complete any one of the subjects.

| Subject | Subject Code | Subject Name |
|--------------------------|--|--|
| Advanced Learners Course | 18UECAL501 | Energy Auditing |
| | 18UECAL502 | Electronic Applications in Agriculture |
| | Massive Open Online Courses (MOOC) from Swayam/ NPTEL/CEC. | |

Elective Courses

The department offers the following Elective courses. Student shall select any one of the two subjects as Elective in the respective semester

| Subject | Subject Code | Subject Name |
|-----------------|---------------------|--|
| Elective | 18UECEL501 | Elective I: Sensors and Transducers |
| | 18UECEL502 | Elective II: Microwave and Fiber Optic Communication |
| | 18UECEL601 | Elective III: Intelligent Instrumentation |
| | 18UECEL602 | Elective IV: Robotics |

FOR COURSE COMPLETION

Students shall complete:

- Language subjects (Tamil/ Hindi/French and English) in I, II, III and IV Semesters.
- Value Education Yoga and Environmental Studies in I and II Semesters respectively.
- Allied subjects in I, II, III and IV semesters.
- Two Add on Courses during Semester III and Semester IV.
- Non Major Elective Courses (NMEC I & NMEC II) during Semester III and Semester IV.
- Skill Based Courses (SBC) from Semester III to Semester VI.
- Extension Activity in V semester.
- Career Competency skills(CCS) from Semester III to Semester VI.
- An individual Project & Viva-Voce at the end of VI semester, but they have to carry out their Project work from V Semester onwards.

TOTAL CREDIT DISTRIBUTION

| PART | Credits | Marks |
|--|----------------|---|
| PART-I | | |
| Tamil/Hindi /French (4 X 3 Credits) | 12 | 400 (4X100 Marks) |
| PART-II | | |
| English (4 X 3 Credits) | 12 | 400 (4X100 Marks) |
| PART-III | | |
| Core Subjects (16 Papers) (4 X 5 Credits) (10 X 4 Credits) | | 400 (4X100 Marks) 1000 (10X100 Marks) |
| Core Practical (9 Practicals) (9 X 2 Credits) | 82 | 900 (9X100 Marks) |
| Core Project (1 X 4 Credits) | | 100 (1X100 Marks) |
| Allied (4 Papers +2 Practicals) (2 X 4 Credits) (2 X 2 Credits) (2 X 2 Credits) | 16 | 200 (2X100 Marks) 200 (2X100 Marks) 200 (2X100 Marks) |
| PART-IV | | |
| Value Education (2 X 2 Credits) | | 200 (2X100 Marks) |
| NMEC (2 X 2 Credits) | 16 | 200 (2X100 Marks) |
| SBC (4 X 2 Credits) | | 400 (4X100 Marks) |
| PART-V | | |
| Extension Activity (1 X 2 Credits) | 2 | - |
| Total | 140 | 4600 |