**1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years**

# INDEX

## SCHEME OF EXAMINATION FOR
## B.E. FIRST YEAR (All Branches of Engineering)
## (SEMESTER – I)

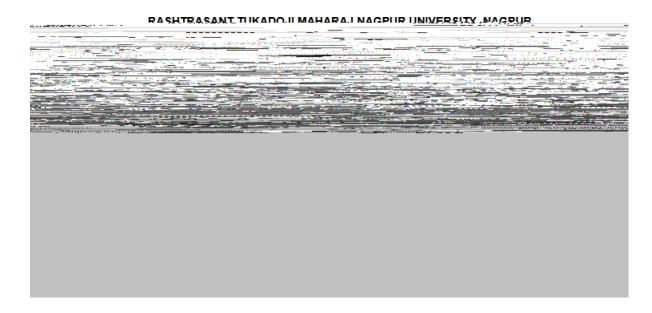| Sr. No. | Subject | Work load | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Theory | | Practical | | |
| | | L | P | T | Total | L | P | T | Total | Sessional | Univ. | Sessional | Univ. | |
| 1. | Applied Mathematics I | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 2. | Engineering Physics | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 4 | 10 | 40 | 25 | 25 | 100 |
| 3. | Engineering Chemistry | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 4 | 10 | 40 | 25 | 25 | 100 |
| 4. | Basic Electrical Engineering | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 4 | 10 | 40 | 25 | 25 | 100 |
| 5. | Basic Civil Engineering | 2 | - | 1 | 3 | 2 | - | 1 | 3 | 10 | 40 | - | - | 50 |
| 6. | Engineering Graphics – I | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 4 | 10 | 40 | 25 | 25 | 100 |
| 7. | Communication Skills | - | 2 | - | 2 | - | 2 | - | 2 | - | - | 25 | 25 | 50 |
| 8. | Computational Skills | - | 2 | - | 2 | - | 2 | - | 2 | - | - | 25 | - | 25 |
| | **Total** | 14 | 12 | 06 | 32 | 14 | 08 | 06 | 28 | 70 | 280 | 150 | 125 | 625 |

Note:
1) The diploma holder students seeking admission to direct second year B.E. and B.Sc. students seeking admission to B.E. First year will be exempted from appearing in examinations of Applied Mathematics I and Applied Mathematics II papers.
2) The students of B.E. Part time will be exempted from appearing in examination of Applied Mathematics I and Applied Mathematics II papers.

## SCHEME OF EXAMINATION FOR
## B.E. FIRST YEAR (All Branches of Engineering)
## (SEMESTER – II)

| Sr. No. | Subject | Work load | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Theory | | Practical | | |
| | | L | P | T | Total | L | P | T | Total | Sessional | Univ. | Sessional | Univ. | |
| 1. | Applied Mathematics – II | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 2. | Advanced Physics | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 4 | 10 | 40 | 25 | 25 | 100 |
| 3. | Materials Chemistry | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 4 | 10 | 40 | 25 | 25 | 100 |
| 4. | Engineering Mechanics | 2 | 2 | 1 | 5 | 2 | 1 | 1 | 4 | 10 | 40 | 25 | 25 | 100 |
| 5. | Advanced Electrical Engineering | 2 | - | 1 | 3 | 2 | - | 1 | 3 | 10 | 40 | - | - | 50 |
| 6. | Engineering Graphics – II | - | 2 | 1 | 3 | - | 2 | 1 | 3 | - | - | 25 | 25 | 50 |
| 7. | Workshop | - | 2 | - | 2 | - | 2 | - | 2 | - | - | 25 | 25 | 50 |
| 8. | Ethical Sciences | 2 | - | - | 2 | 2 | - | - | 2 | 50 | - | - | - | 50 |
| | **Total** | 14 | 10 | 06 | 30 | 14 | 07 | 06 | 27 | 110 | 240 | 125 | 125 | 600 |

**RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR**
**B.E. (Electrical Engineering)**
**SCHEME OF EXAMINATION**

**FOURTH SEMESTER**

| S.N. | Sub Code | Subject | Board | Teaching Scheme | | | | Credits | Examination Scheme | | | Min. Passing Marks | Paper Duration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | Total | | College Assessment | Univ. Assessment | Total Marks | | |
| 1 | BEELE401T | APPLIED MATHEMATICS - IV | ASH | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 2 | BEELE402T | ELEMENTS OF ELECTROMAGNETICS | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 3 | BEELE403T | DIGITAL AND LINEAR ELECTRONIC CIRCUITS | EN | 3 | 1 | 0 | 4 | 4 | 20 | 80 | 100 | 40 | 3 Hours |
| 4 | BEELE403P | DIGITAL AND LINEAR ELECTRONIC CIRCUITS | EN | 0 | 0 | 2 | 2 | 1 | 25 | 25 | 50 | 25 | |
| 5 | BEELE404T | ELECTRICAL MACHINES-I | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 6 | BEELE404P | ELECTRICAL MACHINES-I | EE | 0 | 0 | 2 | 2 | 1 | 25 | 25 | 50 | 25 | |
| 7 | BEELE405T | COMPUTER PROGRAMMING | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 8 | BEELE405P | COMPUTER PROGRAMMING | EE | 0 | 0 | 2 | 2 | 1 | 25 | 25 | 50 | 25 | |
| 9 | BEELE406T | ENVIRONMENTAL STUDIES | ASH | 3 | 0 | 0 | 3 | 0 | 75 + 25 | | Grades | | |
| | | Total | | 22 | 5 | 6 | 33 | 27 | | | 650 | | |

**RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR**
**B.E. (Electrical Engineering)**
**SCHEME OF EXAMINATION**

**FIFTH SEMESTER**

| S.N. | Sub Code | Subject | Board | Teaching Scheme | | | | Credits | Examination Scheme | | | Min. Passing Marks | Paper Duration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | Total | | College Assessment | Univ. Assessment | Total Marks | | |
| 1 | BEELE501T | ELECTRICAL POWER SYST - I | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 2 | BEELE502T | UTILIZATION OF ELECTRIC ENERGY | EE | 3 | 1 | 0 | 4 | 4 | 20 | 80 | 100 | 40 | 3 Hours |
| 3 | BEELE503T | ELECTRICAL MACHINE DESIGN | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 4 | BEELE504T | MICROPROCESSOR & INTERFACING | EN | 3 | 1 | 0 | 4 | 4 | 20 | 80 | 100 | 40 | 3 Hours |
| 5 | BEELE504P | MICROPROCESSOR & INTERFACING | EN | 0 | 0 | 2 | 2 | 1 | 25 | 25 | 50 | 25 | |
| 6 | BEELE505T | ELECTRICAL MACHINES-II | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 7 | BEELE505P | ELECTRICAL MACHINES-II | EE | 0 | 0 | 2 | 2 | 1 | 25 | 25 | 50 | 25 | |
| 8 | BEELE506P | ELECTRICAL DRAWING & SIMULATION | EE | 0 | 0 | 2 | 2 | 2 | 25 | 25 | 50 | 25 | |
| 9 | BEELE507P | ELECTRICAL ENGINEERING WORKSHOP | EE | 0 | 0 | 2 | 2 | 2 | 25 | 25 | 50 | 25 | |
| | | Total | | 18 | 5 | 8 | 31 | 29 | | | 700 | | |

**RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR**
**B.E. (Electrical Engineering)**
**SCHEME OF EXAMINATION**

**SIXTH SEMESTER**

| S.N. | Sub Code | Subject | Board | Teaching Scheme | | | | Credits | Examination Scheme | | | Min. Passing Marks | Paper Duration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | Total | | College Assessment | Univ. Assessment | Total Marks | | |
| 1 | BEELE601T | POWER STATION PRACTICE | EE | 3 | 1 | 0 | 4 | 4 | 20 | 80 | 100 | 40 | 3 Hours |
| 2 | BEELE602T | ENGINEERING ECONOMICS & INDUSTRIAL MANAGEMENT | ASH | 3 | 1 | 0 | 4 | 4 | 20 | 80 | 100 | 40 | 3 Hours |
| 3 | BEELE603T | ELECTRICAL DRIVES & THEIR CONTROL | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 4 | BEELE604T | POWER ELECTRONICS | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 5 | BEELE604P | POWER ELECTRONICS | EE | 0 | 0 | 2 | 2 | 1 | 25 | 25 | 50 | 25 | |
| 6 | BEELE605T | CONTROL SYSTEM-I | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 7 | BEELE605P | CONTROL SYSTEM-I | EE | 0 | 0 | 2 | 2 | 1 | 25 | 25 | 50 | 25 | |
| 8 | BEELE606P | INDUSTRIAL VISITS & REPORT WRITING | EE | 0 | 0 | 2 | 2 | 2 | 50 | 0 | 50 | 25 | |
| 9 | BEELE607T | FUNCTIONAL ENGLISH | ASH | 2 | 0 | 0 | 2 | 2 | 10 | 40 | 50 | 20 | 2 Hours |
| | | Total | | 20 | 5 | 6 | 31 | 29 | | | 700 | | |

# RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR
## B.E. (Electrical Engineering)
## SCHEME OF EXAMINATION

### SEVENTH SEMESTER

| S.N. | Sub Code | Subject | Board | Teaching Scheme | | | | Credits | Examination Scheme | | | Min. Passing Marks | Paper Duration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | Total | | College Assessment | Univ. Assessment | Total Marks | | |
| 1 | BEELE701T | CONTROL SYSTEM-II | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 2 | BEELE702T | **ELECTRICAL POWER SYSTEM –II** | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 3 | BEELE703T | **ELECTIVE –I** | EE | 3 | 1 | 0 | 4 | 4 | 20 | 80 | 100 | 40 | 3 Hours |
| 4 | BEELE704T | HIGH VOLTAGE ENGINEERING | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 5 | BEELE704P | HIGH VOLTAGE ENGINEERING | EE | 0 | 0 | 2 | 2 | 1 | 25 | 25 | 50 | 25 | |
| 6 | BEELE705T | ELECTRICAL INSTALLATION DESIGN | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| 7 | BEELE705P | ELECTRICAL INSTALLATION DESIGN | EE | 0 | 0 | 2 | 2 | 2 | 25 | 25 | 50 | 25 | |
| 8 | BEELE706P | PROJECT SEMINAR | EE | 0 | 0 | 3 | 3 | 3 | 50 | 0 | 50 | 25 | |
| | | Total | | 19 | 5 | 7 | 31 | 30 | | | 650 | | |

# RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY, NAGPUR
## B.E. (Electrical Engineering)
## SCHEME OF EXAMINATION

### EIGHTH SEMESTER

| S.N. | Sub Code | Subject | Board | Teaching Scheme | | | | Credits | Examination Scheme | | | Min. Passing Marks | Paper Duration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | L | T | P | Total | | College | Univ. | Total | | |
| 1 | BEELE801T | ELECTIVE- II | EE | 3 | 1 | 0 | 4 | 4 | 20 | 80 | 100 | 40 | 3 Hours |
| 2 | BEELE802T | ELECTIVE- III | EE | 3 | 1 | 0 | 4 | 4 | 20 | 80 | 100 | 40 | 3 Hours |
| 3 | BEELE803T | SWITCHGEAR & PROTECTION | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| | BEELE803P | SWITCHGEAR & PROTECTION | EE | 0 | 0 | 2 | 2 | 1 | 25 | 25 | 50 | 25 | |
| 4 | BEELE804T | COMPUTER APPLICATIONS IN POWER SYSTEM | EE | 4 | 1 | 0 | 5 | 5 | 20 | 80 | 100 | 40 | 3 Hours |
| | BEELE804P | COMPUTER APPLICATIONS IN POWER SYSTEM | EE | 0 | 0 | 2 | 2 | 1 | 25 | 25 | 50 | 25 | |
| 5 | BEELE805P | PROJECT | EE | 0 | 0 | 6 | 6 | 6 | 75 | 75 | 150 | 75 | |
| | | Total | | 14 | 4 | 10 | 28 | 26 | | | 650 | | |

| S. No. | ELECTIVE-I | ELECTIVE-II | ELECTIVE -III |
|---|---|---|---|
| 1 | IT and Its Applications in Power System Control | Entrepreneurship Development | Bio-medical Engineering |
| 2 | Fuzzy Logic and Neural Networks | Digital Signal Processing | Advanced Microprocessor Peripherals |
| 3 | Flexible AC Transmission Systems | Power Quality | Power Semiconductor Based Electric |
| 4 | Energy Management and Audit | EHV AC and HVDC Transmission | Electrical Distribution System |

**III Semester B.E. (Mechanical Engineering)**

| Subject Code | Subject | Teaching Scheme | | | | Examination Scheme | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Hours per week | | | No. of Credits | Theory | | | | | Practical | | | | |
| | | L | T | P | | Duration of Paper (Hrs.) | Max. Marks University Assessment | Max. Marks College Assessment | Total Marks | Min. Passing Marks | Max. Marks University Assessment | Max. Marks College Assesment | Total Marks | Min. Passing Marks |
| BEME301T | Applied Mathematics- III* | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME302T | Kinematics of Machine | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME303T | Fluid Mechanics | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME304T | Manufacturing Processes | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME304P | Manufacturing Processes | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME305T | Engineering Metallurgy | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME305P | Engineering Metallurgy | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME306P | Machine Drawing | - | 02 | 02 | 04 | - | - | - | - | - | 50 | 50 | 100 | 50 |
| BEME307P | Technical Report and Seminar | - | - | 02 | 02 | - | - | - | - | - | - | 50 | 50 | 25 |
| | **Total** | 15 | 07 | 08 | - | - | 400 | 100 | 500 | - | 100 | 150 | 250 | - |
| | **Semester Total** | | 30 | | 28 | Marks 750 | | | | | | | | |

*Applied Mathematics – III (BEME301T) subject pertains to Board of Studies in Applied Sciences & Humanities

**IV Semester B.E. (Mechanical Engineering)**

| Subject Code | Subject | Teaching Scheme | | | | Examination Scheme | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Hours per week | | | No. of Credits | Theory | | | | | Practical | | | | |
| | | L | T | P | | Duration of Paper (Hrs.) | Max. Marks University Assessment | Max. Marks College Assessment | Total Marks | Min. Passing Marks | Max. Marks University Assessment | Max. Marks College Assesment | Total Marks | Min. Passing Marks |
| BEME401T | Applied Mathematics- IV* | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME402T | Engineering Thermodynamics | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME403T | Hydraulic Machines | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME403P | Hydraulic Machines | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME404T | Machining Processes | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME404P | Machining Processes | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME405T | Mechanics of Material | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME405P | Mechanics of Material | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME406T | Environmental Studies | 03 | - | - | College Assessment in Grades as O, A, B, C, (Evaluation Guidelines mentioned in the Syllabus of concerned Subject) | | | | | | | | | | |
| BEME407P | Mini Project | - | - | 02 | 02 | - | - | - | - | - | - | 50 | 50 | 25 |
| | **Total** | 18 | 05 | 08 | - | - | 400 | 100 | 500 | - | 75 | 125 | 200 | - |
| | **Semester Total** | | 31 | | 25 | Marks 700 | | | | | | | | |

*Applied Mathematics – IV (BEME401T) subject pertains to Board of Studies in Applied Sciences & Humanities

Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur
Faculty of Engineering & Technology
Course and Examination Scheme of Bachelor of Engineering (Mechanical Engineering)

V Semester B.E. (Mechanical Engineering)

| Subject Code | Subject | Teaching Scheme | | | | Examination Scheme | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Hours per week | | | No. of Credits | Theory | | | | | Practical | | | |
| | | L | T | P | | Duration of Paper (Hrs.) | Max. Marks University Assessment | Max. Marks College Assessment | Total Marks | Min. Passing Marks | Max. Marks University Assessment | Max. Marks College Assesment | Total Marks | Min. Passing Marks |
| BEME501T | Industrial Economics and Entrepreneurship Development | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME502T | Design of Machine Elements | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME503T | Advanced Production Processes | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME504T | Heat Transfer | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME504P | Heat Transfer | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME505T | Mechanical Measurement & Metrology | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME505P | Mechanical Measurement & Metrology | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME506P | Computer Applications – I | - | 02 | 02 | 04 | - | - | - | - | - | 50 | 50 | 100 | 50 |
| BEME507P | Industrial Visit | - | - | 02 | Audit Course | | | | | | | | | |
| | Total | 15 | 07 | 08 | 26 | - | 400 | 100 | 500 | - | 100 | 100 | 200 | - |
| | Semester Total | | 30 | | 26 | Marks 700 | | | | | | | | |

Industrial Economics and Entrepreneurship Development (BEME501T) subject pertains to Board of Studies in Applied Sciences & Humanities and all the remaining subjects pertain to the Board of Studies in Mechanical Engineering.

Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur
Faculty of Engineering & Technology
Course and Examination Scheme of Bachelor of Engineering (Mechanical Engineering)

VI Semester B.E. (Mechanical Engineering)

| Subject Code | Subject | Teaching Scheme | | | | Examination Scheme | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Hours per week | | | No. of Credits | Theory | | | | | Practical | | | |
| | | L | T | P | | Duration of Paper (Hrs.) | Max. Marks University Assessment | Max. Marks College Assessment | Total Marks | Min. Passing Marks | Max. Marks University Assessment | Max. Marks College Assesment | Total Marks | Min. Passing Marks |
| BEME601T | Energy Conversion- I | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME602T | Control Systems Engineering | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME603T | Operations Research | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME604T | Mechatronics | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME604P | Mechatronics | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME605T | Dynamics of Machines | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME605P | Dynamics of Machines | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME606T | Functional English | 02 | - | - | 02 | 02 | 40 | 10 | 50 | 20 | - | - | - | - |
| BEME607P | Computer Applications - II | - | 02 | 02 | 04 | - | - | - | - | - | 50 | 50 | 100 | 50 |
| BEME608P | Industrial Case Study | - | - | 02 | 02 | - | - | - | - | - | - | 50 | 50 | 25 |
| | Total | 17 | 07 | 08 | - | - | 440 | 110 | 550 | - | 100 | 150 | 250 | - |
| | Semester Total | | 32 | | 30 | 800 Marks | | | | | | | | |

Functional English (BEME606T) subject pertains to Board of Studies in Applied Sciences & Humanities and all the remaining subjects pertain to the Board of Studies in Mechanical Engineering. Mechatronics (BEME604T/P) subject can also be taught by a teacher from Electronics/Instrumentation/Mechatronics/relevant disciplines.

Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur
Faculty of Engineering & Technology
Course and Examination Scheme of Bachelor of Engineering (Mechanical Engineering)

### VII Semester B.E. (Mechanical Engineering)

| Subject Code | Subject | Teaching Scheme Hours per week | | | No. of Credits | Examination Scheme Theory | | | | | Practical | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L | T | P | | Duration of Paper (Hrs.) | Max. Marks University Assessment | Max. Marks College Assessment | Total Marks | Min. Passing Marks | Max. Marks University Assessment | Max. Marks College Assesment | Total Marks | Min. Passing Marks |
| BEME701T | Industrial Engineering | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME702T | Elective-I | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME703T | Computer Aided Design | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME703P | Computer Aided Design | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME704T | Energy Conversion - II | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME704P | Energy Conversion - II | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME705T | Design of Mechanical Drives | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME705P | Design of Mechanical Drives | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME706P | Project Seminar | - | - | 03 | 03 | - | - | - | - | - | - | 50 | 50 | 25 |
| | Total | 15 | 05 | 09 | - | - | 400 | 100 | 500 | - | 75 | 125 | 200 | - |
| | Semester Total | | 29 | | 26 | | | | | 700 Marks | | | | |

**Elective – I (BEME702T):**

BEME702T1: Industrial Robotics     BEME702T2: Tool Design     BEME702T3: Automobile Engineering
BEME702T4: Power Plant Engineering     BEME702T5: Synthesis of Mechanisms     BEME702T6: Material Handling System

All subjects pertains to Board of Studies in Mechanical Engineering.

Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur
Faculty of Engineering & Technology
Course and Examination Scheme of Bachelor of Engineering (Mechanical Engineering)

### VIII Semester B.E. (Mechanical Engineering)

| Subject Code | Subject | Teaching Scheme Hours per week | | | No. of Credits | Examination Scheme Theory | | | | | Practical | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L | T | P | | Duration of Paper (Hrs.) | Max. Marks University Assessment | Max. Marks College Assessment | Total Marks | Min. Passing Marks | Max. Marks University Assessment | Max. Marks College Assesment | Total Marks | Min. Passing Marks |
| BEME801T | Industrial Management | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME802T | Elective – II | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME802P | Elective – II | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME803T | Elective – III | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME804T | Automation in Production | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME804P | Automation in Production | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME805T | Energy Conversion - III | 03 | 01 | - | 04 | 03 | 80 | 20 | 100 | 40 | - | - | - | - |
| BEME805P | Energy Conversion - III | - | - | 02 | 01 | - | - | - | - | - | 25 | 25 | 50 | 25 |
| BEME806P | Project | - | - | 06 | 06 | - | - | - | - | - | 75 | 75 | 150 | 75 |
| | Total | 15 | 05 | 12 | | - | 400 | 100 | 500 | - | 150 | 150 | 300 | - |
| | Semester Total | | 32 | | 29 | | | | | 800 Marks | | | | |

**Elective – II (BEME802T, BEME802P):**

BEME802T1/P1: Finite Element Method     BEME802T2/P2: Computer Integrated Manufacturing     BEME802T3/P3: Industrial Fluid Power
BEME802T4/P4: Management Information Systems     BEME802T5/P5: Refrigeration & Air-Conditioning     BEME802T6/P6: Stress Analysis

**Elective – III (BEME803T):**

BEME803T1: Advanced Manufacturing Techniques     BEME803T2: Machine Tool Design     BEME803T3: Renewable Energy Systems
BEME803T4: Mechanical Vibrations     BEME803T5: Advance I.C. Engine     BEME803T6: Tribology

All subjects pertains to Board of Studies in Mechanical Engineering.

## Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur
### Faculty of Engineering & Technology
### CIVIL ENGINEERING
### Scheme of Examination & Evaluation
### Semester : Third

| Subject Code | Course | Teaching Scheme ( Clock Hours/Week ) | | | | | Evaluation scheme | | | | | | | | Duration of University Theory Exam (Hrs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Theory hrs/week | Tutorial hrs/week | Practical hrs/week | Total hrs/week | Credits | Assessment of Marks for Theory | | | | Assessment of Marks for Practicals | | | | |
| | | | | | | | College Assessment (CA) | University Exam | Total | Min Marks | Internal | External | Total Marks | Min. Marks | |
| BECVE301T | Mathematics - III | 3 | 1 | - | 4 | 4 | 20 | 80 | 100 | 40 | - | - | - | - | 3 |
| BECVE302T | Strength of Materials | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE302P | Strength of Materials | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE303T | Environmental engineering - I | 4 | 0 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE303P | Environmental engineering - I | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE304T | Engineering Geology | 4 | 0 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE304P | Engineering Geology | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE305T | Concrete Technology | 4 | 0 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE305P | Concrete Technology | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| | TOTAL | 18 | 2 | 8 | 28 | 24 | 100 | 400 | 500 | | 75 | 75 | 150 | | |

## Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur
### Faculty of Engineering & Technology
### CIVIL ENGINEERING
### Scheme of Examination & Evaluation
### Semester : Fourth

| Subject Code | Course | Teaching Scheme ( Clock Hours/ Week ) | | | | Credits | Evaluation Scheme | | | | | | | | Duration of University Theory Exam (Hrs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Theory hrs/week | Tutorial hrs/week | Practical hrs/week | Total hrs/week | | Assessment of Marks for Theory | | | | Assessment of Marks for Practicals | | | | |
| | | | | | | | College Assessment (CA) | University Exam | Total | Min Marks | Internal | External | Total Marks | Min Marks | |
| BECVE401T | Structural Analysis - I | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE401P | Structural Analysis - I | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE402T | Geotechnical Engineering -I | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE402P | Geotechnical Engineering -I | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE403T | Transportation Engineering - I | 4 | 0 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE403P | Transportation Engineering - I | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE404T | Surveying - I | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE404P | Surveying - I | | | 3 | 3 | 2 | | | | | 25 | 25 | 50 | 25 | |
| BECVE405T | Building Construction & Material | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| | Total | 16 | 4 | 9 | 29 | 25 | 100 | 400 | 500 | | 100 | 100 | 200 | | |

Summer Training 1 (ST -1) of minimum two weeks duration /assigned mini project/softwere training etc. during summer vacation after Fourth Semester to be evaluated as Mini Project during Fifth Semester is mandatory.

| Subject Code | Course | Theory hrs/week | Tutorial hrs/week | Practical hrs/week | Total hrs/week | Credits | College Assessment (CA) | University Exam | Total Marks | Min. Marks | Internal | External | Total Marks | Min. Marks | Duration of University Theory Exam (Hrs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Assessment of Marks for Theory | | | | Assessment of Marks for Practicals | | | | |
| BECVE501T | Structural Analysis -II | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE501P | Structural Analysis -II | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE502T | Reinforced Cement Concrete (RCC) Structures | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 4 |
| BECVE502P | Reinforced Cement Concrete (RCC) Structures | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE503T | Fluid Mechanics -I | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE503P | Fluid Mechanics -I | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE504T | Geotechnical Engineering -II | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE505T | Hydrology & Water Resources (HWR) | 4 | | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE506P | Communicative English & Technical Writing | | | 3 | 3 | 2 | | | | | 25 | 25 | 50 | 25 | |
| | Total | 16 | 4 | 9 | 29 | 25 | 100 | 400 | 500 | | 100 | 100 | 200 | | |

Note: 1. "Technical Writing" shall consist of detailed report on Summer Training- 1 (ST-1) underwent after 4th Semester.

2. Equal weightage shall be given to the components of "Communicative English" and "Technical Writing"

| Subject Code | Course | Theory hrs/week | Tutorial hrs/week | Practical hrs/week | Total hrs/week | Credits | College Assessment (CA) | University Exam | Total Marks | Min. Marks | Internal | External | Total Marks | Min. Marks | Duration of University Theory Exam (Hrs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Assessment of Marks for Theory | | | | Assessment of Marks for Practicals | | | | |
| BECVE601T | Steel Structures | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 4 |
| BECVE601P | Steel Structures | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE602T | Surveying-II | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE602P | Surveying-II | | | 4 | 4 | 2 | | | | | 25 | 25 | 50 | 25 | |
| BECVE603T | Fluid Mechanics -II | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE603P | Fluid Mechanics -II | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE604P | Building Design and Drawing | | | 4 | 4 | 4 | | | | | 50 | 50 | 100 | 50 | |
| BECVE605T | Environmental Engineering-II | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE606P | Site Visit & Mini Project | | | 3 | 3 | 3 | | | | | 25 | 25 | 50 | | |
| | Total | 12 | 4 | 15 | 31 | 27 | 80 | 320 | 400 | | 150 | 150 | 300 | | |

Summer Training - 2 (ST-2) of 2-4 Weeks duration during Summer Vacation is mandatory and will be evaluated in Seventh Semester.

Note:
1. External Practical Evaluation of Building Design and Drawing shall be performance based by drawing assigned problem given jointly by the Internal & External Examiners on AutoCAD

2. "Site Visit" shall cover minimum Five Site Visits.

3. "Mini Project" shall include report on Site Visits and Assigned Mini Project/Software Training, etc.

4. Equal weightage shall be given for components of "Site Visits" and "Mini Project".

Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur
Faculty of Engineering & Technology
CIVIL ENGINEERING
Scheme of Examination & Evaluation - CBS
Semester: Seventh

| Subject Code | Course | Teaching Scheme (Clock Hours/ Week) | | | | | Evaluation Scheme | | | | | | | | Duration of University Theory Exam (Hrs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Assessment of Marks for Theory | | | | Assessment of Marks for Practical | | | | |
| | | Theory hrs/week | Tutorial hrs/week | Practical hrs/week | Total hrs/week | Credits | College Assessment (CA) | University Exam | Total Marks | Min. Marks | Internal | External | Total Marks | Min. Marks | |
| BECVE701T | Advanced Concrete Structures | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 4 |
| BECVE701P | Advanced Concrete Structures | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE702T | Estimating and Costing | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 4 |
| BECVE702P | Estimating and Costing | | | 2 | 2 | 1 | | | | | 50 | 50 | 100 | 50 | |
| BECVE703T | Elective -I | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE704T | Construction Management and Law | 4 | | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE705T | Transportation Engineering - II | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE706P | Industrial Case Study and Project Seminar | | | 3 | 3 | 3 | | | | | 50 | 50 | 100 | 50 | |
| | Total | 16 | 4 | 7 | 27 | 25 | 100 | 400 | 500 | | 125 | 125 | 250 | | |

Note: 1. External Practical Evaluation of "Estimating & Costing" shall be performance based (Manual or using suitable Software) on assigned problem by the External Examiner
2. Evaluation of Summer Training – 2 (ST-2) shall be done as Industrial Case Study Component & minimum two seminar should be delivered as continuous college assessment for project seminar component.

Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur
Faculty of Engineering & Technology
CIVIL ENGINEERING
Scheme of Examination & Evaluation - CBS
Semester: Eighth

| Subject Code | Course | Teaching Scheme (Clock Hours/ Week) | | | | | Evaluation Scheme | | | | | | | | Duration of University Theory Exam (Hrs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Assessment of Marks for Theory | | | | Assessment of Marks for Practical | | | | |
| | | Theory hrs/week | Tutorial hrs/week | Practical hrs/week | Total hrs/week | Credits | College Assessment (CA) | University Exam | Total Marks | Min. Marks | Internal | External | Total Marks | Min. Marks | |
| BECVE801T | Irrigation Engineering | 3 | 2 | | 5 | 5 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE802T | Elective - II | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE803T | Elective - III | 4 | | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE803P | Elective - III | | | 2 | 2 | 1 | | | | | 25 | 25 | 50 | 25 | |
| BECVE804T | Construction Economics and Finance | 3 | 1 | | 4 | 4 | 20 | 80 | 100 | 40 | | | | | 3 |
| BECVE805P | Project | | | 6 | 6 | 6 | | | | | 75 | 75 | 150 | 75 | |
| | Total | 13 | 4 | 8 | 25 | 24 | 80 | 320 | 400 | | 100 | 100 | 200 | | |

Note: Internal Evaluation of Project shall be based on the academic contribution of a student and delivery of minimum one seminar on the project work.

BECVE804T - Construction Economics and Finance subject shall be dealt by Board of Basic Science and Humanities.

## SCHEME OF EXAMINATION FOR

### III SEM BACHELOR OF ENGINEERING (ELECTRONICS & COMMUNICATION / ELECTRONICS & TELECOMMUNICATION ENGINEERING )

| Sub Code | Board | SUBJECT | Work Load | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Theory | | Practical | | |
| | | | L | P | T | Total | L | P | T | Total | Internal | University | Internal | University | |
| BEECE301T/BEETE301T | Applied Science & Humanities | Applied Mathematics-III | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE302T/ BEETE302T | Electronics | Electronic Devices & Circuits | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE302P/BEETE302P | Electronics | Electronic Devices & Circuits | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE303T/BEETE303T | Electronics | Electronics Measurement & Instrumentation | 4 | 0 | 0 | 4 | 4 | 0 | 0 | 4 | 20 | 80 | 0 | 0 | 100 |
| BEECE303P/BEETE303P | Electronics | Electronics Measurement & Instrumentation | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE304T/BEETE304T | Electronics | Object Oriented Programming and Data Structure | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE304P/BEETE304P | Electronics | Object Oriented Programming and Data Structure | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE305T/BEETE305T | Electrical | Network Analysis & Synthesis | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| **Total** | | | 20 | 6 | 4 | 30 | 20 | 3 | 4 | 27 | 100 | 400 | 75 | 75 | 650 |

### IV SEM BACHELOR OF ENGINEERING IN(ELECTRONICS & COMMUNICATION / ELECTRONICS & TELECOMMUNICATION ENGINEERING )

| Sub Code | Board | SUBJECT | Work Load | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Theory | | Practical | | |
| | | | L | P | T | Total | L | P | T | Total | Internal | University | Internal | University | |
| BEECE401T/ BEETE401T | Applied Science & Humanities | Applied Mathematics –IV | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE402T/ BEETE402T | Electrical | Power Devices & Machines | 4 | 0 | 0 | 4 | 4 | 0 | 0 | 4 | 20 | 80 | 0 | 0 | 100 |
| BEECE402P/ BEETE402P | Electrical | Power Devices & Machines | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE403T/ BEETE403T | Electronics | Electromagnetic Field | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE404T/ BEETE404T | Electronics | Digital Circuits And Fundamental Of Microprocessor | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE404P/ BEETE404P | Electronics | Digital Circuits And Fundamental Of Microprocessor | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE405T/ BEETE405T | Electronics | Signals & Systems | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE406T/ BEETE406T | Applied Science & Humanities | Environmental Studies | 3 | 0 | 0 | 3 | Audit Course | | | 0 | 0 | 0 | G | 0 | 0 |
| BEECE407P/ BEETE407P | Electronics | Software Workshop | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 25 | 25 | 50 |
| **Total** | | | 23 | 6 | 4 | 33 | 20 | 4 | 4 | 28 | 100 | 400 | 75 | 75 | 650 |

**PROPOSED SCHEME OF EXAMINATION FOR**
**FIFTH SEMESTER BACHELOR OF ENGINEERING**

**(ELECTRONICS & COMMUNICATION/ELECTRONICS & TELECOMMUNICATION ENGINEERING)**

| Sub Code | Board | SUBJECT | Work Load | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Theory | | Practical | | |
| | | | L | P | T | Total | L | P | T | Total | Internal | University | Internal | University | |
| BEECE501T/ BEETE501T | Electronics | Antenna & Wave Propagation | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE502T/ BEETE502T | Electronics | Microprocessor & Microcontroller | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE502P/ BEETE502P | Electronics | Microprocessor & Microcontroller | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE503T/ BEETE503T | Electronics | Analog Circuits & Design | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE503P/ BEETE503P | Electronics | Analog Circuits & Design | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE504T/ BEETE504T | Electronics | Communication Electronics | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE504P/ BEETE504P | Electronics | Communication Electronics | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE505T/ BEETE505T | Applied Science & Humanities | Industrial Economics & Enterpreneurship Development | 4 | 0 | 0 | 4 | 4 | 0 | 0 | 4 | 20 | 80 | 0 | 0 | 100 |
| Total | | | 20 | 6 | 4 | 30 | 20 | 3 | 4 | 27 | 100 | 400 | 75 | 75 | 650 |

## PROPOSED SCHEME OF EXAMINATION FOR

## SIXTH SEMESTER BACHELOR OF ENGINEERING

### (ELECTRONICS & COMMUNICATION/ELECTRONICS & TELECOMMUNICATION ENGINEERING)

| Sub Code | Board | SUBJECT | Work Load | | | | Credit | | | | Marks | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Theory | | Practical | | |
| | | | L | P | T | Total | L | P | T | Total | Internal | University | Internal | University | Total Marks |
| BEECE601T/ BEETE601T | Electronics | Telecommunication Switching Systems | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE602T/ BEETE602T | Electronics | Digital Signal processing | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE602P/ BEETE602P | Electronics | Digital Signal processing | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE603T/ BEETE603T | Electrical | Control System Engg. | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE604T/ BEETE604T | Electronics | Digital Communication | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE604P/ BEETE604P | Electronics | Digital Communication | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 25 | 25 | 50 |
| BEECE605T/ BEETE605T | Applied Science & Humanities | Functional English | 2 | 0 | 1 | 3 | 2 | 0 | 1 | 3 | 10 | 40 | 0 | 0 | 50 |
| BEECE606P/ BEETE606P | Electronics | Electronics Workshop Practice | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 25 | 25 | 50 |
| BEECE607P/ BEETE607P | Electronics | Industrial Visit | 0 | 2 | 0 | 2 | Audit Course | | | 0 | 0 | 0 | G | 0 | 0 |
| Total | | | 18 | 8 | 5 | 31 | 18 | 5 | 5 | 28 | 90 | 360 | 75 | 75 | 600 |

SCHEME OF EXAMINATION FOR

B.E. SEVENTH SEMESTER (ELECTRONICS & COMMUNICATION / ELECTRONICS & TELECOMMUNICATION ENGINEERING )

| Sub Code | Board | SUBJECT | Work Load | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Theory | | Practical | | |
| | | | L | P | T | Total | L | P | T | Total | Inter nal | Unive rsity | Inter nal | Unive rsity | |
| BEECE701T/ BEETE701T | Electronics | DSP Processor & Architecture | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE701P/ BEETE701P | Electronics | DSP Processor & Architecture | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE702T/ BEETE702T | Electronics | Television & Video Engineering | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE702P/ BEETE702P | Electronics | Television & Video Engineering | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE703T/ BEETE703T | Electronics | Optical Communication | 4 | 0 | 0 | 4 | 4 | 0 | 0 | 4 | 20 | 80 | 0 | 0 | 100 |
| BEECE704T/ BEETE704T | Electronics | Advanced Digital System Design | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE704P/ BEETE704P | Electronics | Advanced Digital System Design | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE705T/ BEETE705T | Electronics | Elective-I | 3 | 0 | 1 | 4 | 3 | 0 | 1 | 4 | 20 | 80 | 0 | 0 | 100 |
| BEECE706P/ BEETE706P | Electronics | Project Seminar | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 50 | 0 | 50 |
| Total | | | 19 | 8 | 4 | 31 | 19 | 5 | 4 | 28 | 100 | 400 | 125 | 75 | 700 |

Elective-I – 1. Fuzzy Logic & Neural Network   2. Microelectromechanical Systems and System On Chip   3. Data Compression & Encryption
4. VLSI Signnal Processing

# Rashtrasant Tukadoji Maharaj Nagpur University

Formerly Known as Nagpur University

## SCHEME OF EXAMINATION FOR

### B.E. EIGHTH SEMESTER (ELECTRONICS & COMMUNICATION / ELECTRONICS & TELECOMMUNICATION ENGINEERING )

| Sub Code | Board | SUBJECT | Work Load | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | Theory | | Practical | | |
| | | | L | P | T | Total | L | P | T | Total | Internal | University | Internal | University | |
| BEECE801T/ BEETE801T | Electronics | Microwave & Radar Engineering | 4 | 0 | 0 | 4 | 4 | 0 | 0 | 4 | 20 | 80 | 0 | 0 | 100 |
| BEECE801P/ BEETE801P | Electronics | Microwave & Radar Engineering | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE802T/ BEETE802T | Electronics | Computer Communication Network | 4 | 0 | 1 | 5 | 4 | 0 | 1 | 5 | 20 | 80 | 0 | 0 | 100 |
| BEECE802P/ BEETE802P | Electronics | Computer Communication Network | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 25 | 25 | 50 |
| BEECE803T/ BEETE803T | Electronics | Wireless & Mobile Communication | 4 | 0 | 0 | 4 | 4 | 0 | 0 | 4 | 20 | 80 | 0 | 0 | 100 |
| BEECE804T/ BEETE804T | Electronics | Elective-II | 3 | 0 | 1 | 4 | 3 | 0 | 1 | 4 | 20 | 80 | 0 | 0 | 100 |
| BEECE805T/ BEETE805T | Electronics | Elective-III | 3 | 0 | 1 | 4 | 3 | 0 | 1 | 4 | 20 | 80 | 0 | 0 | 100 |
| BEECE806P/ BEETE806P | Electronics | Project | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 0 | 75 | 75 | 150 |
| Total | | | 18 | 10 | 3 | 31 | 18 | 8 | 3 | 29 | 100 | 400 | 125 | 125 | 750 |

Elective-II – 1. Wireless Sensor Network   2. Embedded System   3.Digital Image Processing  4. Artificial Intelligence

Elective-III – 1.Random Signal Theory    2.Robotics & Automation  3. Satellite Communication  4.CMOS VLSI Design

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## FOUR YEAR BACHELOR OF ENGINEERING (B.E.) DEGREE COURSE
## SEMESTER: THIRD
## BRANCH: COMPUTER SCIENCE & ENGINEERING

| Code | Subject | Workload | | | | Credit | | | | Marks | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Theory | | Practical | | Total |
| | | L | P | T | Total | L | P | T | Total | Sess. | Univ. | Sess. | Uni | Marks |
| 1 BECSE201T | Applied Mathematics | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 2 BECSE202T | Advance "C" & Programming Logic Design | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 3 BECSE202P | Advance "C" & Programming Logic Design lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 4 BECSE203T | Digital Circuits & Fund. of Microprocessor | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 5 BECSE203P | Digital Circuits & Fund. of Microprocessor lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 6 BECSE204T | Ethics in IT | 3 | - | 1 | 4 | 3 | - | 1 | 4 | 20 | 80 | - | - | 100 |
| 7 BECSE205T | Computer Architecture and Organization | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 8 BECSE206P | Computer Workshop - 1 Lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 9 BECSE207T | Environmental Engineering (Audit Course) | 2 | - | - | 2 | - | - | - | 0 | - | - | - | - | - |
| | Total | 21 | 6 | 5 | 32 | 19 | 3 | 5 | 27 | 100 | 400 | 75 | 75 | 650 |

## FOUR YEAR BACHELOR OF ENGINEERING (B.E.) DEGREE COURSE
## SEMESTER: FOURTH
## BRANCH: COMPUTER SCIENCE & ENGINEERING

| Sr. No. | Subject | Workload | | | | Credit | | | | Marks | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Theory | | Practical | | Total |
| | | L | P | T | Total | L | P | T | Total | Sess | Univ. | Sess. | Uni | Marks |
| 1 BECSE208T | Discrete Mathematics & Graph Theory | 3 | - | 1 | 4 | 3 | - | 1 | 4 | 20 | 80 | - | - | 100 |
| 2 BECSE209T | Data Structures & Program Design | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 3 BECSE209P | Data Structures & Program Design Lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 4 BECSE210T | Operating System | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 5 BECSE210P | Operating System lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 6 BECSE211T | Theoretical Foundations of Computer Science | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 7 BECSE212T | System Programming | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 8 BECSE213P | Computer Workshop -2 Lab | - | 2 | - | 2 | - | 2 | - | 2 | - | - | 25 | 25 | 50 |
| | Total | 19 | 6 | 5 | 30 | 19 | 4 | 5 | 28 | 100 | 400 | 75 | 75 | 650 |

FOUR YEAR BACHELOR OF ENGINEERING (B.E.) DEGREE COURSE
SEMESTER: FIFTH
BRANCH: COMPUTER SCIENCE & ENGINEERING

| Sr. No. | Subject | Workload | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Theory | | Practical | | |
| | | L | P | T | Total | L | P | T | Total | Sess. | Univ. | Sess. | Uni | |
| 1 BECSE301T | Data Communication | 3 | - | 1 | 4 | 3 | - | 1 | 4 | 20 | 80 | - | - | 100 |
| 2 BECSE302T | Object Oriented Programming | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 3 BECSE302P | Object Oriented Programming Lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 4 BECSE303T | Database Management System | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 5 BECSE303P | Database Management System Lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 6 BECSE304T | Computer Graphics | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 7 BECSE305T | Design & Analysis of Algorithms | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 8 BECSE305P | Design & Analysis of Algorithms lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| | Total | 19 | 6 | 5 | 30 | 19 | 3 | 5 | 27 | 100 | 400 | 75 | 75 | 650 |

FOUR YEAR BACHELOR OF ENGINEERING (B.E.) DEGREE COURSE
SEMESTER: SIXTH
BRANCH: COMPUTER SCIENCE & ENGINEERING

| Sr. No. | Subject | Workload | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Theory | | Practical | | |
| | | L | P | T | Total | L | P | T | Total | Sess. | Univ. | Sess. | Uni | |
| 1 BECSE306T | Artificial Intelligence | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 2 BECSE307T | Design Patterns | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 3 BECSE307P | Design Patterns lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 4 BECSE308T | Communication Skill | 3 | - | 1 | 4 | 3 | - | 1 | 4 | 20 | 80 | - | - | 100 |
| 5 BECSE309T | Software Engineering & Project Management | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 6 BECSE310T | Computer Networks | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 7 BECSE310P | Computer Networks Lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 8 BECSE311P | Mini Project | - | 2 | - | 2 | - | 2 | - | 2 | - | - | 25 | 25 | 50 |
| | Total | 19 | 6 | 5 | 30 | 19 | 4 | 5 | 28 | 100 | 400 | 75 | 75 | 650 |

FOUR YEAR BACHELOR OF ENGINEERING (B.E.) DEGREE COURSE
SEMESTER: SEVENTH
BRANCH: COMPUTER SCIENCE & ENGINEERING

| Sr. No. | Subject | Workload | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L | P | T | Total | L | P | T | Total | Theory | | Practical | | |
| | | | | | | | | | | Sess. | Univ. | Sess. | Uni | |
| 1 BECSE401T | Data Warehousing & Mining | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 2 BECSE401P | Data Warehousing & Mining Lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 3 BECSE402T | Language Processor | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 4 BECSE402P | Language Processor Lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 5 BECSE403T | ELECTIVE-I | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 6 BECSE404T | ELECTIVE-II | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 7 BECSE405P | Project and Seminar | - | 3 | - | 3 | - | 3 | - | 3 | - | - | 25 | 25 | 50 |
| | **Total** | **16** | **7** | **4** | **27** | **16** | **5** | **4** | **25** | **80** | **320** | **75** | **75** | **550** |

Elective I: TCP and IP, Advanced Computer Architecture, Big Data Analysis & Business Intelligence, Parallel and Network Algorithm.

Elective II: Computational Geometry, Mobile Computing, Real Time Operating System, Software Architecture, Mainframe Technologies

FOUR YEAR BACHELOR OF ENGINEERING (B.E.) DEGREE COURSE
SEMESTER: EIGHTH
BRANCH: COMPUTER SCIENCE & ENGINEERING

| Sr. No. | Subject | Workload | | | | Credit | | | | Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | L | P | T | Total | L | P | T | Total | Theory | | Practical | | |
| | | | | | | | | | | Sess. | Univ. | Sess. | Uni | |
| 1 BECSE406T | Distributed Operating system | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 2 BECSE406P | Distributed Operating system Lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 3 BECSE407T | Information & Cyber Security | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 4 BECSE407P | Information & Cyber Security Lab | - | 2 | - | 2 | - | 1 | - | 1 | - | - | 25 | 25 | 50 |
| 5 BECSE408T | ELECTIVE-III | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 6 BECSE409T | ELECTIVE-IV | 4 | - | 1 | 5 | 4 | - | 1 | 5 | 20 | 80 | - | - | 100 |
| 7 BECSE410P | Project & Seminar | - | 5 | - | 5 | - | 5 | - | 5 | - | - | 75 | 75 | 150 |
| | **Total** | **16** | **9** | **4** | **29** | **16** | **7** | **4** | **27** | **80** | **320** | **125** | **125** | **650** |

Elective III: Pattern Recognition, Soft Computing Techniques, Optimization Techniques, Clustering & Cloud Computing

Elective IV: Advance Wireless Sensor Network, Digital Image Processing, Natural Language Processing, Digital Forensic.

building of student in various functional areas of business management. These *Electives* will give the students a chance to study a subject according to his/her area of interest and will also help in developing his/her personality. Two elective courses are to be selected by a student from the groups of electives before commencement of 3rd Semester of the program.

A student is required to Select *Any Two* Electives as following:
- Either both the Electives from Core Group
  OR
- One Elective each from Core Group and Complementary Group

| Core Group | Marketing Management |
| | Financial Management |
| | Human Resource Management |
| Complementary Group | Operations Management |
| | Service Sector Management |

Note: The affiliated Management Institutes / Colleges/ Department shall declare the Elective/Specialization it is offering before the commencement of admission process of Semester -I in their Information Brochure and website and communicate the same to the University well in advance. The Institute will offer the Specialization proposed only if minimum**FIVE** students opt for the same.

10. Credit System of Evaluation:
   a. Courses offered, contact hours, credits attached and allocation of marks shall be as follows:

## Semester-I

| Course Code | Course Name | Internal / University Examination | Instruction Hours | Tutorial Hours | Total Hours | Marks | | | Credits |
| | | | | | | Semester End Exam. | Internal Assessment | Total | |
|---|---|---|---|---|---|---|---|---|---|
| MBCI-1 | Principles of Management | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBCI-2 | Managerial Economics | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBCI-3 | Accounting for Managers | Uni. | 25 | 15 | 40 | 80 | 20 | 100 | 4 |
| MBCI-4 | Business Legislations | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBCI-5 | Business Communication and Information Systems | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBCI-6 | Research Methodology and Quantitative Techniques | Uni. | 25 | 15 | 40 | 80 | 20 | 100 | 4 |
| Total | | | 170 | 70 | 240 | 480 | 120 | 600 | 24 |

## Semester-II

| Course Code | Course Name | Internal / University Examination | Instruction Hours | Tutorial Hours | Total Hours | Marks | | | Credits |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Semester End Exam. | Internal Assessment | Total | |
| MBCII-1 | Human Resource Management & Organizational Behaviour | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBCII-2 | Financial Management | Uni. | 25 | 15 | 40 | 80 | 20 | 100 | 4 |
| MBCII-3 | Marketing Management | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBCII-4 | Operations Management | Uni. | 25 | 15 | 40 | 80 | 20 | 100 | 4 |
| MBCII-5 | Cost Accounting | Uni. | 25 | 15 | 40 | 80 | 20 | 100 | 4 |
| MBCII-6 | Economic Environment of Business | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| Total | | | 165 | 75 | 240 | 480 | 120 | 600 | 24 |

## Semester-III

| Course Code | Course Name | Internal / University Examination | Instruction Hours | Tutorial Hours | Total Hours | Marks | | | Credits |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Semester End Exam. | Internal Assessment | Total | |
| MBCIII-1 | Strategic Management | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBCIII-2 | Summer Internship Project Assessment | Uni. | 10 | 30 | 40 | 00 | 100 | 100 | 4 |
| MBFIII-1 | Project Management OR Environment | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBEIII-11 | Elective I – Paper 1 | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBEIII-12 | Elective I – Paper 2 | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBEIII-21 | Elective II – Paper 1 | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBEIII-22 | Elective II – Paper 2 | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| Total | | | 190 | 90 | 280 | 480 | 220 | 700 | 28 |

Note: One Foundation Course is to be selected by the student from MBFIII-1 and Two Elective Groups to be selected in the manner mentioned above.

## Semester-IV

| Course Code | Course Name | Internal / University Examination | Instruction Hours | Tutorial Hours | Total Hours | Marks | | | Credits |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Semester End Exam. | Internal Assessment | Total | |
| MBCIV-1 | Business Ethics & Corporate Governance | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBCIV-2 | Entrepreneurship Development | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBCIV-3 | Project Work | Uni. | | 40 | 40 | 150 | 50 | 200 | 8 |
| MBFIV-2 | International Business Management OR Agri-Business Management | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBEIV-13 | Elective I – Paper 3 | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| MBEIV-23 | Elective II – Paper 3 | Uni. | 30 | 10 | 40 | 80 | 20 | 100 | 4 |
| | Total | | 150 | 90 | 240 | 550 | 150 | 700 | 28 |

Note: One Foundation Course is to be selected by the student from MBFIV-2.