



# CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY

**Courses of Study and Scheme of Examination of B.E. First Year (2012-13)**  
Common to all branches of Engineering except Bio-Tech. & Bio-Medical Engg.

## FIRST SEMESTER

| S. No | Board of Study         | Subject Code | Subject                                  | Periods Per Week |   |    | Scheme of Examination |     |     | Total Marks | Credit<br>[L+[T+P]]<br>2 |
|-------|------------------------|--------------|--|------------------|---|----|-----------------------|-----|-----|-------------|--------------------------|
|       |                        |              |  |                  |   |    | Theory                |     |     |             |                          |
|       |                        |              |  | L                | T | P  | ESE                   | CT  | TA  |             |                          |
| 1     | Basic Sciences         | 300114(14)   | Applied Mathematics-I                    | 4                | 1 | -  | 80                    | 20  | 20  | 120         | 5                        |
| 2     | Humanities             | 300111(46)   | Professional Communication in English    | 4                | - | -  | 80                    | 20  | 20  | 120         | 4                        |
| 3     | Basic Sciences         | 300112(11)   | Applied Chemistry                        | 4                | 1 | -  | 80                    | 20  | 20  | 120         | 5                        |
| 4     | Mechanical Engineering | 300211(37)   | Engineering Graphics                     | 2                | 1 | 4  | 80                    | 20  | 20  | 120         | 5                        |
| 5     | Elect. Engg.           | 300118(24)   | Elements of Electrical Engineering (New) | 4                | 1 | -  | 80                    | 20  | 20  | 120         | 5                        |
| 6     | Basic Sciences         | 300121(11)   | Applied Chemistry (Lab)                  | -                | - | 2  | 40                    | -   | 20  | 60          | 1                        |
| 7     | Elect. Engg.           | 300126(24)   | Elements of Electrical Engineering (Lab) | -                | - | 2  | 40                    | -   | 20  | 60          | 1                        |
| 8     | Mechanical Engineering | 300124(37)   | Workshop Practice                        | -                | - | 3  | 40                    | -   | 20  | 60          | 2                        |
| 9     | Humanities             | 300127(46)   | Library & Seminar                        | -                | - | 1  | -                     | -   | 20  | 20          | 1                        |
| TOTAL |                        |              |  | 18               | 4 | 12 | 520                   | 100 | 180 | 800         | 29                       |

L-Lecture, T-Tutorial, P-Practical, ESE – End Semester Exam, CT- Class Test, TA- Teacher's Assessment

Note: (i) The teaching in the 1<sup>st</sup> and 2<sup>nd</sup> semester will be divided in two groups consisting of various branches as shown below: P1-GROUP: Electronics & Communication, Information Technology, Electronics & Instrumentation, Electrical, Chemical, Electrical & Electronics; Q1-GROUP: Computer Science, Mechanical, Civil, Mining and Applied Electronics & Instrumentation, Metallurgy Mechatronics.

(ii) Applied Mathematics-I will be taught to both the groups in the first semester.

(iii) Library & seminar will be conducted by the relevant discipline/humanities as decided by the Principal.



  
PRINCIPAL

Rungta College of Engg. & Tech.  
Kohka Kurud Road, Kurud, Bhilai-490024



# CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY

**Courses of Study and Scheme of Examination of B.E. First Year (2012-13)**  
Common to all branches of Engineering except Bio-Tech. & Bio-Medical Engg.

## SECOND SEMESTER

| S. No | Board of Study   | Subject Code | Subject                                     | Periods Per Week |   |   | Scheme of Examination |     |     | Total Marks | Credit [L+[T+P]]<br>2 |
|-------|------------------|--------------|---|------------------|---|---|-----------------------|-----|-----|-------------|-----------------------|
|       |                  |              |   |                  |   |   | Theory                |     |     |             |                       |
|       |                  |              |   | L                | T | P | ESE                   | CT  | TA  |             |                       |
| 1     | Basic Sciences   | 300214(14)   | Applied Mathematics-II                      | 4                | 1 | - | 80                    | 20  | 20  | 120         | 5                     |
| 2     | Civil Engg.      | 300212(20)   | Environment & Ecology                       | 4                | - | - | 80                    | 20  | 20  | 120         | 4                     |
| 3     | Basic Sciences   | 300218(15)   | Applied Physics (New)                       | 4                | 1 | - | 80                    | 20  | 20  | 120         | 5                     |
| 4     | Civil Engg.      | 300216(20)   | Basic Civil Engineering                     | 4                | 1 | - | 80                    | 20  | 20  | 120         | 5                     |
| 5     | Mechanical Engg. | 300219(37)   | Fundamental of Mechanical Engineering (New) | 4                | 1 | - | 80                    | 20  | 20  | 120         | 5                     |
| 6     | Basic Sciences   | 300228(15)   | Applied Physics (Lab)                       | -                | - | 2 | 40                    | -   | 20  | 60          | 1                     |
| 7     | Mechanical Engg. | 300229(37)   | Mechanical Engineering (Lab)                | -                | - | 2 | 40                    | -   | 20  | 60          | 1                     |
| 8     | Humanities       | 300221(46)   | Communication Skills (Lab)                  | -                | - | 3 | 40                    | -   | 20  | 60          | 2                     |
| 9     | Humanities       | 300220(46)   | Library & Seminar                           | -                | - | 1 | -                     | -   | 20  | 20          | 1                     |
| TOTAL |                  |              |   | 20               | 4 | 8 | 520                   | 100 | 180 | 800         | 29                    |

L-Lecture, T-Tutorial, P-Practical, ESE – End Semester Exam, CT- Class Test, TA- Teacher's Assessment

Note:

- (i) The teaching in the 1<sup>st</sup> and 2<sup>nd</sup> semester will be divided in two groups consisting of various branches as shown below:  
P1-GROUP: Electronics & Communication, Information Technology, Electronics & Instrumentation, Electrical, Chemical, Electrical & Electronics; Q1-GROUP: Computer Science, Mechanical, Civil, Mining and Applied Electronics & Instrumentation, Metallurgy, Mechatronics.



- (ii) Applied Mathematics-II will be taught to both the groups in the second semester.

- (iii) Library & seminar will be conducted by the relevant discipline/humanities as decided by the Principal.

**PRINCIPAL**

**Rungta College of Engg. & Tech.**  
Kohka Kurud Road, Kurud, Bhilai-490024

# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Scheme of Teaching and Examination

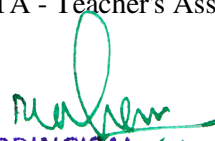
### B.E. III Semester Electronics & Telecommunication Engineering

| Sl. No.      | Board of Study         | Code No.      | Subjects                           | Period Per Week |          |           | Scheme of Exam Theory/Practical |            |            | Total Marks | Credit L+(T+P)/2 |
|--------------|------------------------|---------------|------------------------------------|-----------------|----------|-----------|---------------------------------|------------|------------|-------------|------------------|
|              |                        |               |                                    | L               | T        | P         | ESE                             | CT         | TA         |             |                  |
| 1            | Appl. Mathematics      | 328311(14)    | Mathematics-III                    | 4               | 1        | -         | 80                              | 20         | 20         | 120         | 5                |
| 2            | Appl. Mathematics      | 328312 ( 14 ) | Numerical Analysis                 | 3               | 1        | -         | 80                              | 20         | 20         | 120         | 4                |
| 3            | Electronics & Telecom. | 328313 ( 28 ) | Basic Electronics                  | 3               | 1        | -         | 80                              | 20         | 20         | 120         | 4                |
| 4            | Electronics & Telecom. | 328314 ( 28 ) | Network Analysis and Synthesis     | 3               | 1        | -         | 80                              | 20         | 20         | 120         | 4                |
| 5            | Electronics & Telecom. | 328315 ( 28 ) | Solid State Devices and Components | 2               | 1        | -         | 80                              | 20         | 20         | 120         | 3                |
| 6            | Electronics & Telecom. | 328316 ( 28 ) | Programming with C                 | 3               | 1        | -         | 80                              | 20         | 20         | 120         | 4                |
| 7            | Electronics & Telecom. | 328321 ( 28 ) | Network Analysis and Synthesis Lab | -               | -        | 3         | 40                              | -          | 20         | 60          | 2                |
| 8            | Electronics & Telecom. | 328322 ( 28 ) | Basic Electronics Lab              | -               | -        | 3         | 40                              | -          | 20         | 60          | 2                |
| 9            | Electronics & Telecom. | 328323 ( 28 ) | Programming with C Lab             | -               | -        | 4         | 40                              | -          | 20         | 60          | 2                |
| 10           | Electronics & Telecom. | 328324 ( 28 ) | Electronics Workshop               | -               | -        | 3         | 40                              | -          | 20         | 60          | 1                |
| 11           | Humanities etc.        | 300325 ( 46 ) | Value Education                    | -               | -        | 2         | -                               | -          | 40         | 40          | 1                |
| 12           |                        |               | Library                            | -               | -        | 1         | -                               | -          | -          | -           | -                |
| <b>TOTAL</b> |                        |               |                                    | <b>18</b>       | <b>6</b> | <b>16</b> | <b>640</b>                      | <b>120</b> | <b>240</b> | <b>1000</b> | <b>32</b>        |



L - Lecture, T - Tutorial, P - Practical, ESE- End Semester Examination, CT - Class Test, TA - Teacher's Assessment

Note: Duration of all theory papers will be of **Three Hours**.

  
PRINCIPAL

Rungta College of Engg. & Tech.  
Kohka Kurud Road, Kurud, Bhilai-490024

# CHHATTISGARH SWAMI VIVEKANAD TECHNICAL UNIVERSITY, BHILAI

## SCHEME OF TEACHING AND EXAMINATION

### BE (Electronics & Telecommunication Engineering) IV Semester

| Sl. No. | Board of Study         | Code No.   | Subjects                                    | Period Per Week |   |    | Scheme of Exam   |     |     | Total Marks | Credit L+(T+P)/2 |
|---------|------------------------|------------|---|-----------------|---|----|------------------|-----|-----|-------------|------------------|
|         |                        |            |   | L               | T | P  | Theory/Practical |     |     |             |                  |
|         |                        |            |   |                 |   |    | ESE              | CT  | TA  |             |                  |
| 1       | Electronics & Telecom. | 328451(28) | Numerical Analysis Using C                  | 3               | 1 | -  | 80               | 20  | 20  | 120         | 4                |
| 2       | Electronics & Telecom. | 328452(28) | Analog Communication                        | 3               | 1 | -  | 80               | 20  | 20  | 120         | 4                |
| 3       | Electronics & Telecom. | 328453(28) | Analog Electronics                          | 3               | 1 | -  | 80               | 20  | 20  | 120         | 4                |
| 4       | Electronics & Telecom. | 328454(28) | Microprocessor and Interfaces               | 3               | 1 | -  | 80               | 20  | 20  | 120         | 4                |
| 5       | Electronics & Telecom. | 328455(28) | Signals and Systems                         | 3               | 1 | -  | 80               | 20  | 20  | 120         | 4                |
| 6       | Electronics & Telecom. | 328456(28) | Electromagnetic Fields & Transmission Lines | 3               | - | -  | 80               | 20  | 20  | 120         | 3                |
| 7       | Electronics & Telecom. | 328461(28) | Numerical Analysis Using C Lab              | -               | - | 4  | 40               | -   | 20  | 60          | 2                |
| 8       | Electronics & Telecom. | 328462(28) | Analog Communication Lab                    | -               | - | 4  | 40               | -   | 20  | 60          | 2                |
| 9       | Electronics & Telecom. | 328463(28) | Analog Electronics Lab                      | -               | - | 4  | 40               | -   | 20  | 60          | 2                |
| 10      | Electronics & Telecom. | 328464(28) | Microprocessor and Interfaces Lab           | -               | - | 2  | 40               | -   | 20  | 60          | 1                |
| 11      | Humanities             | 328465(46) | Health, Hygiene & Yoga                      | -               | - | 2  | -                | -   | 40  | 40          | 1                |
| 12      |                        |            | Library                                     | -               | - | 1  | -                | -   | -   | -           | -                |
| TOTAL   |                        |            |   | 18              | 5 | 17 | 640              | 120 | 240 | 1000        | 31               |

**L: Lecture, T: Tutorial, P: Practical, ESE: End Semester Exam, CT: Class Test, TA: Teachers Assessment**

**Note (1): Duration of all theory papers will be of Three Hours.**

**Note (2): Industrial Training of six weeks is mandatory for B.E. student. It is to be completed in two parts. The first part will be in summer after IV semester after which students have to submit a training report which will be evaluated by the college teachers during B.E. V semester.**



  
PRINCIPAL

Rungta College of Engg. & Tech.  
Kohka Kurud Road, Kurud, Bhilai-490024

# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Scheme of Teaching and Examination B.E. V SEMESTER

### ELECTRONICS AND TELECOMMUNICATION ENGINEERING

| Sl. No. | Board of Study                  | Code No.   | Subjects                                      | Period Per Week |   |    | Scheme of Examination |     |     | Total Marks | Credit L+(T+P)/2 |
|---------|---------------------------------|------------|---|-----------------|---|----|-----------------------|-----|-----|-------------|------------------|
|         |                                 |            |   | L               | T | P  | Theory/ Practical     |     |     |             |                  |
|         |                                 |            |   |                 |   |    | ESE                   | CT  | TA  |             |                  |
| 1       | Electronics & Telecommunication | 328551(28) | Linear Integrated Circuits & Applications     | 3               | 1 | -  | 80                    | 20  | 20  | 120         | 4                |
| 2       | Electronics & Telecommunication | 328552(28) | Data Structures and Programming with C++      | 3               | 1 | -  | 80                    | 20  | 20  | 120         | 4                |
| 3       | Electronics & Telecommunication | 328553(28) | Antennas and Wave Propagation                 | 3               | 1 | -  | 80                    | 20  | 20  | 120         | 4                |
| 4       | Electronics & Telecommunication | 328554(28) | Digital Communication                         | 3               | 1 | -  | 80                    | 20  | 20  | 120         | 4                |
| 5       | Electronics & Telecommunication | 328555(28) | Advanced Microprocessor and Interfacing       | 3               | 1 | -  | 80                    | 20  | 20  | 120         | 4                |
| 6       | Electronics & Telecommunication | 328556(28) | Automatic Control System                      | 3               | 1 | -  | 80                    | 20  | 20  | 120         | 4                |
| 7       | Electronics & Telecommunication | 328561(28) | Linear Integrated Circuits & Applications Lab | -               | - | 3  | 40                    | -   | 20  | 60          | 2                |
| 8       | Electronics & Telecommunication | 328562(28) | Data Structures and Programming with C++ Lab  | -               | - | 4  | 40                    | -   | 20  | 60          | 2                |
| 9       | Electronics & Telecommunication | 328563(28) | Digital Communication Lab                     | -               | - | 4  | 40                    | -   | 20  | 60          | 2                |
| 10      | Electronics & Telecommunication | 328564(28) | Advanced Microprocessor and Interfacing Lab   | -               | - | 2  | 40                    | -   | 20  | 60          | 1                |
| 11      | Humanities                      | 300565(46) | Personality Development                       | -               | - | 2  | -                     | -   | 20  | 20          | 1                |
| 12      | Electronics & Telecommunication | 328566(28) | *Practical Training Evaluation and Library    | -               | - | 1  | -                     | -   | 20  | 20          | 1                |
| TOTAL   |                                 |            |   | 18              | 6 | 16 | 640                   | 120 | 240 | 1000        | 33               |

**L:** Lecture

**T:** Tutorial

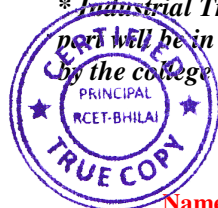
**P:** Practical

**ESE:** End Semester Examination

**CT:** Class Test

**TA:** Teacher's Assessment

*\* Industrial Training of eight weeks is mandatory for B.E. student. It is to be completed in two parts. The first part will be in summer after IV sem. after which students have to submit a training report which will be evaluated by the college teachers during B.E. V sem.*



*[Signature]*  
**PRINCIPAL**

**Rungta College of Engg. & Tech.**  
Kohka Kurud Road, Kurud, Bhilai-490024

**Name of the Programme: Bachelor of Engineering :::: Duration of the Programme: Four Years**

# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Scheme of Teaching and Examination

### B.E. VI Semester

### Electronics & Telecommunication Engineering

| Sl. No. | Board of Study                  | Code No.   | Subjects                      | Period Per Week |   |    | Scheme of Exam    |     |     | Total Marks | Credit L+(T+P)/2 |
|---------|---------------------------------|------------|-------------------------------|-----------------|---|----|-------------------|-----|-----|-------------|------------------|
|         |                                 |            |                               | L               | T | P  | Theory/ Practical |     |     |             |                  |
|         |                                 |            |                               |                 |   |    | ESE               | CT  | TA  |             |                  |
| 1       | Electronics & Telecommunication | 328651(28) | Digital Signal Processing     | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4                |
| 2       | Electronics & Telecommunication | 328652(28) | Electronic Circuit Design     | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4                |
| 3       | Electronics & Telecommunication | 328653(28) | Microcontroller & Embedded    | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4                |
| 4       | Electronics & Telecommunication | 328654(28) | VLSI Design                   | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4                |
| 5       | Electronics & Telecommunication | 328655(28) | Information Theory & Coding   | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4                |
| 6       | Refer Table -I                  |            | Professional Elective -I      | 3               | - | -  | 80                | 20  | 20  | 120         | 3                |
| 7       | Electronics & Telecommunication | 328661(28) | Digital Signal Processing Lab | -               | - | 2  | 40                | -   | 20  | 60          | 1                |
| 8       | Electronics & Telecommunication | 328662(28) | Electronic Circuit Design Lab | -               | - | 4  | 40                | -   | 20  | 60          | 2                |
| 9       | Electronics & Telecommunication | 328663(28) | Microcontroller & Embedded    | -               | - | 4  | 40                | -   | 20  | 60          | 2                |
| 10      | Electronics & Telecommunication | 328664(28) | VLSI Design Lab               | -               | - | 4  | 40                | -   | 20  | 60          | 2                |
| 11      | Management                      | 300665(76) | Managerial Skills             | -               | - | 2  | -                 | -   | 40  | 40          | 1                |
| 12      |                                 |            | Library                       | -               | - | 1  | -                 | -   | -   | -           | -                |
| TOTAL   |                                 |            |                               | 18              | 5 | 17 | 640               | 120 | 240 | 1000        | 31               |

**L:** Lecture      **T:** Tutorial      **P:** Practical  
**ESE:** End Semester Examination      **CT:** Class Test      **TA:** Teachers' Assessment

**Note:** Industrial Training of eight weeks is mandatory for B.E. students. It is to be completed in two equal parts. The first part must have been completed in summer after IV semester. The second part to be completed during summer after VI semester after which students have to submit a training report which will be evaluated by college teachers during B.E. VII semester.

**Table 1**  
**Professional Elective – I**

| Sl. No. | Board of Study         | Code       | Subject                                       |
|---------|------------------------|------------|---|
| 1       | Electronics & Telecom. | 328671(28) | Internet & Web Technology                     |
| 2       | Electronics & Telecom. | 328672(28) | Operating System                              |
| 3       | Electronics & Telecom. | 328673(28) | Biomedical Electronics                        |
| 4       | Electronics & Telecom. | 328674(28) | Electronic Engineering Materials & Components |
| 5       | Electronics & Telecom. | 328675(28) | Computer Organization & Architecture          |
| 6       | Electronics & Telecom. | 328676(28) | Advanced Semiconductor Devices                |

**Note:**

- 1/4<sup>th</sup> of total strength of students to minimum of twenty students is required to offer an elective in the college in a particular academic session
- Choice of elective course once made for an examination cannot be changed in future examinations.



*(Signature)*  
PRINCIPAL

Name of the Programme: Bachelor of Engineering

Duration of the Programme: 3 years  
Rungta College of Engg. & Tech.  
Kohka Kurud Road, Kurud, Bhilai-490024

# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Scheme of Teaching and Examination

### B.E. VII Semester Electronics & Telecommunication Engineering

| Sl. No. | Board of Study         | Code No.   | Subjects                                    | Period Per Week |   |    | Scheme of Exam    |     |     | Total Marks | Credit L+(T+P) |
|---------|------------------------|------------|---|-----------------|---|----|-------------------|-----|-----|-------------|----------------|
|         |                        |            |   | L               | T | P  | Theory/ Practical | ESE | CT  | TA          |                |
| 1       | Electronics & Telecom. | 328731(28) | Microwave Communication and Engineering     | 4               | 1 | -  | 80                | 20  | 20  | 120         | 5              |
| 2       | Electronics & Telecom. | 328732(28) | Computer Networks                           | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4              |
| 3       | Electronics & Telecom. | 328733(28) | Wireless Communications                     | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4              |
| 4       | Electronics & Telecom. | 328734(28) | Management Concepts & Techniques            | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4              |
| 5       | Refer Table -2         |            | Professional Elective - II                  | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4              |
| 6       | Electronics & Telecom. | 328761(28) | Microwave Communication and Engineering Lab | -               | - | 4  | 40                | -   | 20  | 60          | 2              |
| 7       | Electronics & Telecom. | 328762(28) | Computer Networks Lab                       | -               | - | 4  | 40                | -   | 20  | 60          | 2              |
| 8       | Electronics & Telecom. | 328763(28) | Advance Communication Lab                   | -               | - | 4  | 40                | -   | 20  | 60          | 2              |
| 9       | Electronics & Telecom. | 328764(28) | Minor Project                               | -               | - | 4  | 100               | -   | 40  | 140         | 2              |
| 10      | Management             | 328765(28) | Innovative & Entrepreneurial Skills         | -               | - | 2  | -                 | -   | 40  | 40          | 1              |
| 11      | Electronics & Telecom. | 328766(28) | **Practical Training Evaluation and Library | -               | - | 1  | -                 | -   | 40  | 40          | 1              |
| TOTAL   |                        |            |   | 16              | 5 | 19 | 620               | 100 | 280 | 1000        | 31             |

L-Lecture, T- Tutorial, P - Practical, ESE- End Semester Examination, CT - Class Test, TA - Teacher's Assessment

\*\* To be completed after VI Semester and before the commencement of VII Semester

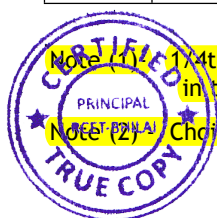
**Table -2**

#### Professional Elective - II

| Sl. No. | Board of Study             | Code       | Subject                                 |
|---------|----------------------------|------------|---|
| 1       | Electronics & Telecom.     | 328741(28) | Digital Circuit Design with Verilog HDL |
| 2       | Electronics & Telecom.     | 328742(28) | System Design with ARM                  |
| 3       | Electronics & Telecom.     | 328743(28) | Robotics & Controls                     |
| 4       | Electronics & Telecom.     | 328744(28) | Radar and Navigational Aids             |
| 5       | Electrical and Electronics | 325745(25) | Industrial Automation                   |
| 6       | Electronics & Telecom.     | 328746(28) | Neural Network & Fuzzy Logic            |
| 7       | Electronics & Telecom.     | 328747(28) | RF Communication Design                 |
| 8       | Electronics & Telecom.     | 328748(28) | VLSI System Design                      |
| 9       | Electronics & Telecom.     | 328749(28) | Digital Image Processing                |

Note (1) 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college a particular academic session.

Note (2) Choice of elective course once made for an examination cannot be changed in future examinations.



PRINCIPAL

Rungta College of Engg. & Tech.  
Kohka Kurud Road, Kurud, Bhilai-490024



# Chhattisgarh Swami Vivekanand Technical University, Bhilai

## Scheme of Teaching and Examination

### B.E. VIII Semester Electronics & Telecommunication Engineering

| Sl. No. | Board of Study         | Code No.    | Theory Subjects                       | Period Per Week |   |    | Scheme of Exam    |     |     | Total Marks | Credit L+(T+P)/2 |
|---------|------------------------|-------------|---------------------------------------|-----------------|---|----|-------------------|-----|-----|-------------|------------------|
|         |                        |             |                                       | L               | T | P  | Theory/ Practical |     |     |             |                  |
|         |                        |             |                                       |                 |   |    | ESE               | CT  | TA  |             |                  |
| 1       | Electronics & Telecom. | 328811 (28) | Optical Communication                 | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4                |
| 2       | Electronics & Telecom. | 328812 (28) | VLSI Design                           | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4                |
| 3       | Electronics & Telecom. | 328813 (28) | Industrial & Power Electronics        | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4                |
| 4       | Refer Table -3         |             | Professional Elective - III           | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4                |
| 5       | Refer Table -4         |             | Open Elective - IV                    | 3               | 1 | -  | 80                | 20  | 20  | 120         | 4                |
| 6       | Electronics & Telecom. | 328821 (28) | Optical Communication Lab             | -               | - | 4  | 40                | -   | 20  | 60          | 2                |
| 7       | Electronics & Telecom. | 328822 (28) | VLSI Design Lab                       | -               | - | 4  | 40                | -   | 20  | 60          | 2                |
| 8       | Electronics & Telecom. | 328823 (28) | Digital Circuit Simulation Laboratory | -               | - | 4  | 40                | -   | 20  | 60          | 2                |
| 9       | Electronics & Telecom. | 328824 (28) | Major Project                         | -               | - | 5  | 100               | -   | 80  | 180         | 3                |
| 10      | Electronics & Telecom. | 300825 (28) | Report Writing & Seminar              | -               | - | 2  | -                 | -   | 40  | 40          | 1                |
| 11      |                        |             | Library                               | -               | - | 1  | -                 | -   | -   | -           | -                |
| TOTAL   |                        |             |                                       | 15              | 5 | 20 | 620               | 100 | 280 | 1000        | 30               |

L-Lecture, T- Tutorial, P - Practical, ESE- End Semester Examination, CT - Class Test, TA - Teacher's Assessment

**Table -3**  
**Professional Elective - III**

**Telecommunication Group:**

| Sl. No. | Board of Study         | Code        | Subject                               |
|---------|------------------------|-------------|---------------------------------------|
| 1       | Electronics & Telecom. | 328871 (28) | Video Transmission & Reception        |
| 2       | Electronics & Telecom. | 328872 (28) | Radar Engineering & Navigational Aids |
| 3       | Electronics & Telecom. | 328873 (28) | Information Theory & Coding           |

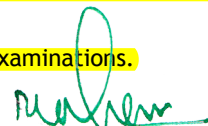
**Allied Group:**

| Sl. No. | Board of Study         | Code        | Subject                                    |
|---------|------------------------|-------------|--|
| 1       | Electronics & Telecom. | 328874 (28) | DSP Processors & Applications              |
| 2       | Electronics & Telecom. | 328875 (28) | Micro-electronic Devices & VLSI Technology |
| 3       | Electronics & Telecom. | 328876 (28) | Industrial Automation                      |
| 4       | Electronics & Telecom. | 328877 (28) | Digital Image Processing                   |

**Note (1)-** 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a particular academic session.

**Note (2)-** Choice of elective course once made for an examination cannot be changed in future examinations.



  
**PRINCIPAL**  
 Rungta College of Engg. & Tech.  
 Kohka Kurud Road, Kurud, Bhilai-490024

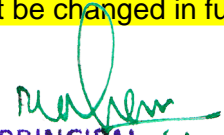


| Open Elective -4 |                          |             |   |
|------------------|--------------------------|-------------|---|
| S.No.            | Board of Studies         | Code        | Name of Subject                                 |
| 1                | Management               | 300881 (36) | Enterprise Resource Planning                    |
| 2                | Information Technology   | 300882 (33) | E-Commerce & strategic IT                       |
| 3                | Management               | 300883 (36) | Technology Management                           |
| 4                | Information Technology   | 300884 (33) | Decision Support & Executive Information system |
| 5                | Computer Science & Engg. | 300885 (22) | Software Technology                             |
| 6                | Management               | 300886 (36) | Knowledge Entrepreneurship                      |
| 7                | Management               | 300887 (36) | Finance Management                              |
| 8                | Management               | 300888 (36) | Project Planning, Management & Evaluation       |
| 9                | Mechanical Engg.         | 300889 (37) | Safety Engineering                              |
| 10               | Computer Science & Engg. | 300890 (22) | Bio Informatics                                 |
| 11               | Mechanical Engg.         | 300891 (37) | Energy Conservation & Management                |
| 12               | Nanotechnology           | 300892 (47) | Nanotechnology                                  |
| 13               | Management               | 300893 (36) | Intellectual Property Rights                    |
| 14               | Mechanical Engg.         | 300894 (37) | Value Engineering                               |
| 15               | Civil Engg.              | 300895 (20) | Disaster Management                             |
| 16               | Civil Engg.              | 300896 (20) | Construction Management                         |
| 17               | Civil Engg.              | 300897 (20) | Ecology and Sustainable Development             |
| 18               | Chem. Engg.              | 300898 (19) | Non Conventional Energy Sources                 |
| 19               | Electrical Engg.         | 300899 (24) | Energy Auditing and Management                  |

Note (1)- 1/4th of total strength of students subject to minimum of twenty students is required to offer an elective in the college in a particular academic session.

Note (2) - Choice of elective course once made for an examination cannot be changed in future examinations.



  
**PRINCIPAL**  
 Rungta College of Engg. & Tech.  
 Kohka Kurud Road, Kurud, Bhilai-490024

**Table - IV**

| <b>Open Elective –IV</b> |                                |             |  |
|--------------------------|--------------------------------|-------------|--|
| <b>S.No.</b>             | <b>Board of Studies</b>        | <b>Code</b> | <b>Name of Subject</b>   |
| 1                        | Management                     | 300851(76)  | Enterprise Resource Planning <b>(Except CSE &amp; IT Branch)</b>     |
| 2                        | Information Technology         | 300852(33)  | E-Commerce & strategic IT <b>(Except CSE &amp; IT Branch)</b>        |
| 3                        | Management                     | 300853(76)  | Technology Management  |
| 4                        | Information Technology         | 300854(33)  | Decision Support & Executive Information system                      |
| 5                        | Computer Science & Engg.       | 300855(22)  | Software Technology  |
| 6                        | Management                     | 300856(76)  | Knowledge Entrepreneurship   |
| 7                        | Management                     | 300857(76)  | Finance Management   |
| 8                        | Management                     | 300858(76)  | Project Planning, Management & Evaluation                            |
| 9                        | Mechanical Engg.               | 300859(37)  | Safety Engineering   |
| 10                       | Computer Science & Engg.       | 300801(22)  | Bio Informatics  |
| 11                       | Mechanical Engg.               | 300802(37)  | Energy Conservation & Management                                     |
| 12                       | Nanotechnology                 | 300803(47)  | Nanotechnology   |
| 13                       | Management                     | 300804(76)  | Intellectual Property Rights   |
| 14                       | Mechanical Engg.               | 300805(37)  | Value Engineering  |
| 15                       | Civil Engg.                    | 300806(20)  | Disaster Management  |
| 16                       | Civil Engg.                    | 300807(20)  | Construction Management  |
| 17                       | Civil Engg.                    | 300808(20)  | Ecology and Sustainable Development                                  |
| 18                       | Chem. Engg.                    | 300809(19)  | Non Conventional Energy Sources                                      |
| 19                       | Electrical Engg.               | 300810(24)  | Energy Auditing & Management <b>(Except Electrical Engg. Branch)</b> |
| 20                       | Mechanical Engg.               | 300811(37)  | Managing Innovation & Entrepreneurship                               |
| 21                       | Information Technology         | 300812(33)  | Biometrics   |
| 22                       | Information Technology         | 300813(33)  | Information Theory & Coding  |
| 23                       | Computer Science & Engg.       | 300814(22)  | Supply Chain Management  |
| 24                       | Computer Science & Engg.       | 300815(22)  | Internet & Web Technology  |
| 25                       | Electrical Engg.               | 300816(24)  | Electrical Estimation and Costing                                    |
| 26                       | Electrical & Electronics Engg. | 300817(25)  | Non Conventional Energy Sources                                      |
| 27                       | Computer Science & Engg.       | 300818(22)  | Big Data and Hadoop  |

Note (1) 1/4<sup>th</sup> of total strength of students is required to offer an elective in the college in a particular academic session.

(2) - Choice of elective course once made for an examination cannot be changed



  
**PRINCIPAL**  
 Rungta College of Engg. & Tech.  
 Kohka Kurud Road, Kurud, Bhilai-490024