

**JABALPUR ENGINEERING COLLEGE, JABALPUR**  
**(Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal)**

Choice Based Credit System (CBCS)

Scheme of Examination w.e.f.

**Bachelor of Engineering (Civil Engineering)**

**Semester - IV**

| S. No. | Subject Category | Subject Code | Subject Name          | Maximum Marks Allotted |         |           |      |             |                           |         |          |                       |    | Hours/Week |    |          | Total Credits |
|--------|------------------|--------------|-----------------------|------------------------|---------|-----------|------|-------------|---------------------------|---------|----------|-----------------------|----|------------|----|----------|---------------|
|        |                  |              |                       | Theory                 |         |           |      |             | Practical                 |         |          |                       |    | L          | T  | P        |               |
|        |                  |              |                       | End Sem                | Minor-I | Minor -II | Quiz | Assignments | Tutorials/Problem Solving | End Sem | Lab Work | Viva Voice Assignment |    |            |    |          |               |
| 1      | DC               | CE-242       | Fluid Mechanics-I     | 60                     | 10      | 10        | 5    | 5           | 10                        | 10      | 20       | 20                    | 2  | 1          | 2  | 4        |               |
| 2      | EAS              | CE-241       | Material Science      | 60                     | 10      | 10        | 5    | 5           | 10                        | -       | -        | -                     | 3  | 1          | -  | 4        |               |
| 3      | DC               | CE-243       | Geotech - I           | 60                     | 10      | 10        | 5    | 5           | 10                        | 10      | 20       | 20                    | 2  | 1          | 2  | 4        |               |
| 4      | DC               | CE-244       | Transportation Engg-I | 60                     | 10      | 10        | 5    | 5           | 10                        | -       | -        | -                     | 3  | 1          | 0  | 4        |               |
| 5      | DC               | CE-245       | Advance Surveying     | 60                     | 10      | 10        | 5    | 5           | 10                        | 10      | 20       | 20                    | 2  | 1          | 2  | 4        |               |
| 6      | DE               | CE-246       | Concrete Technology   | 60                     | 10      | 10        | 5    | 5           | 10                        | -       | -        | -                     | 3  | 1          |    | 4        |               |
| 7      | EAS              | CE-247       | Programming Tools     | -                      | -       | -         | -    | -           | -                         | 10      | 20       | 20                    | -  | -          | 4  | 2        |               |
| 8      | HU               | HU-248       | NSS/NCC               | -                      | -       | -         | -    | -           | -                         | -       | -        | -                     | -  | -          | -  | Qualifer |               |
|        |                  |              | Total                 | 360                    | 60      | 60        | 30   | 30          | 60                        | 40      | 80       | 80                    | 15 | 6          | 10 | 26       |               |

L: Lecture

T: Tutorial

P: Practical



  
08/9/16



**Jabalpur Engineering College, Jabalpur (M.P.)**  
**Choice Based Credit System (CBCS)**  
**Scheme of Examination**  
**Bachelor of Engineering (Mechanical Engineering)**

W.E.F. 20 Jan 2017

**SEMESTER IV**

| S. No.                              | Subject Category | Subject Code | Subject Name           | Maximum Marks Allotted |         |          |      |            |                               |         |          |                          |    | Hours/Week |    |            | Total Credits |
|-------------------------------------|------------------|--------------|------------------------|------------------------|---------|----------|------|------------|-------------------------------|---------|----------|--------------------------|----|------------|----|------------|---------------|
|                                     |                  |              |                        | Theory                 |         |          |      |            | Practical                     |         |          |                          |    | L          | T  | P          |               |
|                                     |                  |              |                        | End Sem                | Minor-I | Minor-II | Quiz | Assignment | Tutorials/<br>Problem Solving | End Sem | Lab Work | Viva Voce/<br>Assignment |    |            |    |            |               |
| 1.                                  | DC               | ME 242       | Fluid Mechanics        | 60                     | 10      | 10       | 5    | 5          | 10                            | 10      | 20       | 20                       | 3  | -          | 2  | 4          |               |
| 2.                                  | DC               | ME 243       | Machine Drawing<br>CAD | 60                     | 10      | 10       | 5    | 5          | 10                            | 10      | 20       | 20                       | 3  | -          | 2  | 4          |               |
| 3.                                  | DC               | ME 244       | Energy Conversion      | 60                     | 10      | 10       | 5    | 5          | 10                            | 10      | 20       | 20                       | 2  | 1          | 2  | 4          |               |
| 4.                                  | DC               | ME 245       | Machine Design-I       | 60                     | 10      | 10       | 5    | 5          | 10                            | -       | -        | -                        | 3  | 1          | -  | 4          |               |
| 5.                                  | EAS              | ME 246       | Computer Programming   | -                      | -       | -        | -    | -          | -                             | 10      | 20       | 20                       | -  | -          | 4  | 2*         |               |
| 6.                                  | DE               | MA 241       | Mathematics-III        | 60                     | 10      | 10       | 5    | 5          | 10                            | -       | -        | -                        | 3  | 1          | -  | 4          |               |
| 7.                                  | EAS              | ME 247       | System Engineering     | 60                     | 10      | 10       | 5    | 5          | 10                            | -       | -        | -                        | 3  | 1          | -  | 4          |               |
| 8.                                  | HU               | PU 248       | NSS/NCC                | -                      | -       | -        | -    | -          | -                             | -       | -        | -                        | -  | -          | -  | Qualifier* |               |
| Total                               |                  |              |                        | 360                    | 60      | 60       | 30   | 30         | 60                            | 40      | 80       | 80                       | 17 | 4          | 10 | 26         |               |
| L: Lecture T: Tutorial P: Practical |                  |              |                        |                        |         |          |      |            |                               |         |          |                          |    |            |    |            |               |

L: Lecture T: Tutorial P: Practical

**Note:**

- For 'Computer Programming' there will be no examination and credits will be awarded only on the basis of internal assessment.
- NSS/NCC is just a qualifier subject which means student has to compulsorily qualify this is a mandatory requirement for the award of degree before completing the course.
- Mathematics- III will be a departmental elective subject with content customized to the requirements of parent discipline.

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# JABALPUR ENGINEERING COLLEGE, JABALPUR

Choice Based Credit System (CBCS)

Scheme of Examination

Bachelor of Engineering (Electrical Engineering) Semester-IV

| Maximum Marks Allotted |          |              |                                  |         |         |          |      |            |                           |         |          |                       |    |      | Hours/Week |    |  | Total Credits |
|------------------------|----------|--------------|----------------------------------|---------|---------|----------|------|------------|---------------------------|---------|----------|-----------------------|----|------|------------|----|--|---------------|
| S. No.                 | Category | Subject Code | Subject Name                     | Theory  |         |          |      |            | Practical                 |         |          |                       |    | Week |            |    |  |               |
|                        |          |              |                                  | End Sem | Minor-I | Minor-II | Quiz | Assignment | Tutorial/ Problem Solving | End Sem | Lab Work | Viva Voce/ Assignment | L  | T    | P          |    |  |               |
| 1                      | DC       | EE 242       | Electrical Machine-I             | 60      | 10      | 10       | 5    | 5          | 10                        | 10      | 20       | 20                    | 3  | 0    | 2          | 4  |  |               |
| 2                      | EAS      | EE 247       | System Engineering               | 60      | 10      | 10       | 5    | 5          | 10                        | -       | -        | -                     | 3  | 1    | -          | 4  |  |               |
| 3                      | DC       | EE 242       | Digital Electronics Logic Design | 60      | 10      | 10       | 5    | 5          | 10                        | 10      | 20       | 20                    | 2  | 1    | 2          | 4  |  |               |
| 4                      | DC       | EE 244       | Power System-I                   | 60      | 10      | 10       | 5    | 5          | 10                        | -       | -        | -                     | 3  | 1    | -          | 4  |  |               |
| 5                      | DC       | EE 245       | Control Systems                  | 60      | 10      | 10       | 5    | 5          | 10                        | 10      | 20       | 20                    | 2  | 1    | 2          | 4  |  |               |
| 6                      | EAS      | MA 241       | Mathematics-III                  | 60      | 10      | 10       | 5    | 5          | 10                        | -       | -        | -                     | 3  | 1    | -          | 4  |  |               |
| 7                      | DC       | EE 246       | Residential Load Simulation Lab  | -       | -       | -        | -    | -          | -                         | 10      | 20       | 20                    | -  | -    | 4          | 2  |  |               |
| Total                  |          |              |                                  | 350     | 60      | 60       | 30   | 30         | 60                        | 40      | 80       | 130                   | 15 | 6    | 10         | 26 |  |               |

MO21NB NSS/NC

K. H. H. H.

M. H. H. H.

**Proposed Scheme for opinion/suggestions** (You are requested to go through the proposed schemes of III & IV semesters as per CBCS scheme. Send your opinion / feedback and valuable suggestions latest by 30/05/2016, to [cbcs@rgtu.net](mailto:cbcs@rgtu.net), [ce@rgtu.net](mailto:ce@rgtu.net))

**Bachelor of Engineering (Electronics & Communication Engineering) Semester: IV**

| S. No. | Subject Code | Subject Name                               | Maximum marks allotted |         |          |      |             |                           |           |          |                    |    | Hours /Week |   |    | Credits |
|--------|--------------|--------------------------------------------|------------------------|---------|----------|------|-------------|---------------------------|-----------|----------|--------------------|----|-------------|---|----|---------|
|        |              |                                            | Theory                 |         |          |      |             |                           | Practical |          |                    |    | Total       |   |    |         |
|        |              |                                            | End Sem                | Minor-I | Minor-II | Quiz | Assignments | Tutorials/Problem Solving | End Sem   | Lab Work | Viva Voce / Assign |    |             |   |    |         |
| 1.     | BS MA-241    | System Engineering <b>Maths III.</b>       | 60                     | 10      | 10       | 5    | 5           | 10                        | -         | -        | -                  | 3  | 1           | - | 4  |         |
| 2.     | DE EC-242    | Digital Electronics circuit <b>Systems</b> | 60                     | 10      | 10       | 5    | 5           | 10                        | 10        | 20       | 20                 | 3  | 1           | 2 | 5  |         |
| 4.     | DE EC-243    | Integrated Circuits and its Applications   | 60                     | 10      | 10       | 5    | 5           | 10                        | 10        | 20       | 20                 | 2  | 1           | 2 | 4  |         |
| 5.     | DC EC-244    | Communication <del>Systems</del> <b>I</b>  | 60                     | 10      | 10       | 5    | 5           | 10                        | 10        | 20       | 20                 | 3  | 1           | 2 | 5  |         |
| 6      | DC EC-245    | Electromagnetic Fields & Waves             | 60                     | 10      | 10       | 5    | 5           | 10                        | -         | -        | -                  | 3  | 1           | - | 4  |         |
| 7.     | DE EC-247    | Simulation Lab                             | -                      | -       | -        | -    | -           | -                         | 10        | 20       | 20                 | -  | -           | 2 | 1  |         |
| 8.     | DC EC-246    | Open Category Elective <b>1. Cyber law</b> | 60                     | 10      | 10       | 5    | 5           | 10                        | -         | -        | -                  | 3  | -           | - | 3  |         |
|        |              | <b>Total</b>                               | 360                    | 60      | 60       | 30   | 30          | 60                        | 40        | 80       | 80                 | 17 | 5           | 8 | 26 |         |

HU268 - NSS / NICE

*Signature*  
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**Jabalpur Engineering College, Jabalpur**  
**Bachelor of Engineering (Computer Science and Engineering) IV sem (CBCS)**

| S. N. O. | Subject Category | Subject Code | Subject Name                             | Maximum Marks allotted |         |          |      |             |                            |           |          |            |    | Hours/Week |    |    | Total Credits |
|----------|------------------|--------------|------------------------------------------|------------------------|---------|----------|------|-------------|----------------------------|-----------|----------|------------|----|------------|----|----|---------------|
|          |                  |              |                                          | Theory                 |         |          |      |             |                            | Practical |          |            |    | L          | T  | P  |               |
|          |                  |              |                                          | End Sem                | Minor-I | Minor-II | Quiz | Assignments | Tutorials/ Problem solving | End Sem   | Lab Work | Viva Voce/ |    |            |    |    |               |
| 1.       |                  | 241          | Numerical Computation and Queuing theory | 60                     | 10      | 10       | 5    | 5           | 10                         | -         | -        | -          | 3  | 1          | -  | 4  |               |
| 2.       |                  | 242          | Database management System               | 60                     | 10      | 10       | 5    | 5           | 10                         | 10        | 20       | 20         | 2  | 1          | 2  | 4  |               |
| 3.       |                  | 243          | Computer System Organization             | 60                     | 10      | 10       | 5    | 5           | 10                         | 10        | 20       | 20         | 2  | 1          | 2  | 4  |               |
| 4.       |                  | 244          | Analysis and Design of Algorithm         | 60                     | 10      | 10       | 5    | 5           | 10                         | 10        | 20       | 20         | 2  | 1          | 2  | 4  |               |
| 5.       |                  | 245          | Theory of Computation                    | 60                     | 10      | 10       | 5    | 5           | 10                         | -         | -        | -          | 3  | 1          | -  | 4  |               |
| 6.       |                  | 247          | Computer Programming-II Java Technology  | -                      | -       | -        | -    | -           | -                          | 10        | 20       | 20         | -  | -          | 4  | 2  |               |
| 7.       |                  | 246          | Open Electives                           | 60                     | 10      | 10       | 5    | 5           | 10                         | -         | -        | -          | 3  | 1          | -  | 4  |               |
|          |                  |              | Total                                    | 360                    | 60      | 60       | 30   | 30          | 60                         | 40        | 80       | 80         | 15 | 6          | 10 | 26 |               |

Total Marks : 800

HO240 NSS/NC

Open Elective:

1. Industrial Engineering and Management
2. Industrial Economics
3. Introduction to Nanop Electronics
4. Fiber Optics and Laser Equipments

*[Signature]*

9/9/16

## CBCS scheme 2016

## Bachelor of Engineering (Information Technology) Semester: IV

| S.No. | Subject Code | Subject Name                             | Maximum marks allotted |         |          |      |             |                 |           |          |              |             |   |    | Total Credits |
|-------|--------------|------------------------------------------|------------------------|---------|----------|------|-------------|-----------------|-----------|----------|--------------|-------------|---|----|---------------|
|       |              |                                          | Theory                 |         |          |      |             |                 | Practical |          |              | Hours/ Week |   |    |               |
|       |              |                                          | End Sem                | Minor-I | Minor-II | Quiz | Assignments | Problem Solving | End Sem   | Lab Work | Voce /Assign | L           | T | P  |               |
|       |              |                                          |                        |         |          |      |             |                 |           |          |              |             |   |    |               |
| 1     | EAS          | Numerical Computation and Queuing Theory | 60                     | 10      | 10       | 5    | 5           | 10              | -         | -        | -            | 3           | 1 | -  | 4             |
| 2     | DC           | Algorithm Analysis and Design            | 60                     | 10      | 10       | 5    | 5           | 10              | 10        | 20       | 20           | 2           | 1 | 2  | 4             |
| 3     | EAS          | Structured System Analysis and Design    | 60                     | 10      | 10       | 5    | 5           | 10              | -         | -        | -            | 3           | 1 | -  | 4             |
| 4     | DC           | Principal of Communication               | 60                     | 10      | 10       | 5    | 5           | 10              | 10        | 20       | 20           | 3           | 0 | 2  | 4             |
| 5     | DC           | Computer Architecture                    | 60                     | 10      | 10       | 5    | 5           | 10              | 10        | 20       | 20           | 2           | 1 | 2  | 4             |
| 6     | DC           | E-Commerce, E-Business and E-Governance  | 60                     | 10      | 10       | 5    | 5           | 10              | -         | -        | -            | 3           | 1 | -  | 4             |
| 7     | EAS          | Computer Programming Lab- JAVA           | -                      | -       | -        | -    | -           | -               | 10        | 20       | 20           | -           | - | 4  | 2             |
| 8     | HU           | NSS / NCC                                | -                      | -       | -        | -    | -           | -               | -         | -        | -            | -           | - | -  | Qualifier     |
|       | Total        |                                          | 360                    | 60      | 60       | 30   | 30          | 60              | 40        | 80       | 80           | 16          | 5 | 10 | 26            |

P. J. Rao

H. K. Rao

S. S. Srinivas

**Choice Based Credit System (CBCS)**  
**Scheme of Examination w.e.f.**  
**Bachelor of Engineering (Industrial Production Engineering)**

**SEMESTER IV**

| S.No. | Subject Category | Subject Code | Subject Name          | Maximum Marks Allotted |          |      |                                 |         |           |                      |    |    |    | Hours/Week |   |    | Total Credits |
|-------|------------------|--------------|-----------------------|------------------------|----------|------|---------------------------------|---------|-----------|----------------------|----|----|----|------------|---|----|---------------|
|       |                  |              |                       | Theory                 |          |      |                                 |         | Practical |                      |    |    |    | L          | T | P  |               |
|       |                  |              |                       | End Sem I              | Minor II | Quiz | Tutorial Assign/Problem Solving | End Sem | Lab Work  | Viva Voce/Assignment |    |    |    |            |   |    |               |
| 1.    | DC               | IP-225       | Fluid Mechanics       | 60                     | 10       | 10   | 5                               | 5       | 10        | 10                   | 20 | 20 | 3  | 0          | 2 |    | 4             |
| 2.    | DC               | IP-226       | Machine Drawing & CAD | 60                     | 10       | 10   | 5                               | 5       | 10        | 10                   | 20 | 20 | 3  | -          | 2 |    | 4             |
| 3.    | DC               | IP-227       | Energy Conversion     | 60                     | 10       | 10   | 5                               | 5       | 10        | 10                   | 20 | 20 | 2  | 1          | 2 |    | 4             |
| 4.    | DC               | IP-228       | Machine Design-I      | 60                     | 10       | 10   | 5                               | 5       | 10        | -                    | -  | -  | 3  | 1          | - |    | 4             |
| 5.    | EAS              | IP-229       | Computer Programming  | -                      | -        | -    | -                               | -       | 10        | 20                   | 20 | -  | -  | -          | 4 |    | 2*            |
| 6.    | DE               | MA-220       | Mathematics-III       | 60                     | 10       | 10   | 5                               | 5       | 10        | -                    | -  | -  | 3  | 1          | - |    | 4             |
| 7.    | EAS              | ES-221       | System Engineering    | 60                     | 10       | 10   | 5                               | 5       | 10        | -                    | -  | -  | 3  | 1          | - |    | 4             |
| 8.    | HU               | HU-223       | NSS/NCC               | -                      | -        | -    | -                               | -       | -         | -                    | -  | -  | -  | -          | - |    | Qualifier*    |
| Total |                  |              |                       | 360                    | 60       | 60   | 60                              | 30      | 30        | 60                   | 40 | 80 | 80 | 17         | 4 | 10 | 26            |

**Note:**  
 For 'Computer Programming' there will be no examination and credits will be awarded only on the basis of internal assessment.  
 NSS/NCC is just a qualifier subject which means student has to compulsorily qualify. As per mandatory requirement for the award of degree before completing the course.  
 Mathematics- III will be a departmental elective subject with content customized to the requirements of parent discipline.

(Prof. Jyoti Shalvi) (Prof. Sanjay Soni) (Prof. U.K. Joshi) (Dr. L.K. Patel) &