# Study & Evaluation Scheme

# of

# Diploma in Engineering
# (CIVIL ENGINEERING)

**[Applicable w.e.f. Academic Session 2024-25]**

Approved by Academic Council


## FUTURE UNIVERSITY

**18th Milestone, Bareilly-Lucknow Highway NH-24**
**Near Faridpur, Bareilly, Uttar Pradesh 243503**
**Website: www.futureuniversity.in**

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**(Established under Govt. of U. P. Act No. 12, 2024)**

## Study & Evaluation Scheme
## of
## Diploma in Engineering (CIVIL ENGINEERING)
**SUMMARY**

Programme : Diploma in Engineering (CIVIL ENGINEERING)

Duration : Three years full time (Six Semesters)

Medium : English/ Hindi

Minimum Required Attendance : 75 percent

**Credit**

Maximum Credit : **132**

Minimum credit required for the degree : **120**

Assessment (Theory) :

| Internal | External | Total |
|---|---|---|
| 30% | 70% | 100% |

Assessment (Practical) :

| Internal | External | Total |
|---|---|---|
| 30% | 70% | 100% |

Internal Evaluation (Theory Papers)

| Class Test I | Class Test II | Assignment(s) | Other Activity (including attendance) | Total |
|---|---|---|---|---|
| 10 Marks | 10 Marks | 5 Marks | 5 Marks | 30 Marks |

Internal Evaluation (Practical Papers)

| Experiment File Viva | Mid Semester Exam | Attendance | Total |
|---|---|---|---|
| 10 Marks | 10 Marks | 10 Marks | 30 Marks |

Duration of Examination (Theory) :

| External | Internal |
|---|---|
| 3 hrs. | 1 ½ hrs |

Duration of Examination (Practical) **:** As per the requirement of the practical paper.

To qualify the course a student is required to secure a minimum of 40% marks in aggregate including the semester end examination and teachers' continuous evaluation. (i.e. both internal and external).
A candidate who secures less than of 40% of marks in a course shall be deemed to have failed in that course. The student should have at least 50% marks in aggregate to clear the semester. In case a student has more than 40% in each course, but less than 50% overall in a semester, he/she shall re-appear in courses where the marks are less than 50% to achieve the required aggregate percentage of 50% in the semester.

**Question Paper Structure**

1. ***The question paper shall consist of six questions. Out of which first question shall be of short answer type (not exceeding 50 words) and will be compulsory. Question No. 1 shall contain 8 parts representing all units of the syllabus and students shall have to answer any five (weight age 4 marks each).***
2. ***Out of the rest five questions, students shall be required to attempt all five questions, but there will be an internal choice of A or B. Each question will be from one unit of the syllabus. The weight age of Question No. 2 to 6 shall be 10 marks each.***

# *Faculty of Engineering & Technology*

## *Department of Diploma in Engineering*

## *Civil Engineering*

## *Evaluation Scheme*

| Credit Framework for Diploma in Engineering - NEP-2020 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Sem.** | **Major (Core)** | **Minor Stream** | **Multidisciplinary** | **Ability Enhancement course** | **Skill Enhancement Course** | **Value added Courses Common for All Diploma** | **Summer Internship** | **Research Project/Dissertation** | **Total Credit** |
| 1. | 14 | 5 | | | 3 | 2 | | | 24 |
| 2. | 17 | 4 | 2 | | | 1 | | | 24 |
| 3. | 14 | | 2 | | 5 | 1 | | | 22 |
| 4. | 16 | | | 3 | | 1 | 2 | | 22 |
| 5. | 14 | | 3 | | | 3 | | | 20 |
| 6. | 15 | 2 | | | | 1 | | 2 | 20 |

**Total Credit- 132**

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# *Polytechnic (Diploma in Engineering), Semester I*

| | | | | | | | Evaluation Scheme | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SN | Subject Name | Type | Category | Period | | | Sessional Component | | Sessional (SW) (TS/PS) | End Semester Examination (ESE) | Total | Credit |
| | | | | L | T | P | CT | TA | CT+TA | TE/PE | SW+ESE | Cr |
| 1. | Mathematics-I | T | Major (Core) | 3 | 1 | - | 20 | 10 | 30 | 70 | 100 | 4 |
| 2. | Applied Physics-I | T | Major (Core) | 3 | 1 | - | 20 | 10 | 30 | 70 | 100 | 4 |
| 3. | Applied Chemistry | T | Major (Core) | 3 | 1 | - | 20 | 10 | 30 | 70 | 100 | 4 |
| 4. | Communication Skills in English | T | Skill Enhancement | 3 | - | - | 20 | 10 | 30 | 70 | 100 | 3 |
| 5. | Applied Physics Lab | P | Minor Stream | - | - | 4 | - | 20 | 20 | 30 | 50 | 2 |
| 6. | Applied Chemistry Lab | P | Minor Stream | - | - | 2 | - | 20 | 20 | 30 | 50 | 1 |
| 7. | Communication Skills Lab | P | Minor Stream | - | - | 2 | - | 20 | 20 | 30 | 50 | 1 |
| 8. | Engineering Graphics | P | Major (Core) | - | - | 4 | - | 20 | 20 | 30 | 50 | 2 |
| 9. | Engineering Workshop Practice Lab | P | Minor Stream | - | - | 2 | - | 20 | 20 | 30 | 50 | 1 |
| 10. | General Proficiency | - | Value Added | - | - | 2 | - | 50 | 50 | - | 50 | 1 |
| 11. | Sports & Yoga | - | Value Added | - | - | 2 | - | 20 | 20 | 30 | 50 | 1 |
| | **Total** | | | **12** | **3** | **18** | **80** | **210** | **290** | **460** | **750** | **24** |

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# *Polytechnic (Diploma in Engineering), Semester II*

| | | | | | | | Evaluation Scheme | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SN** | **Subject Name** | **Type** | **Category** | **Period** | | | **Sessional Component** | | **Sessional (SW) (TS/PS)** | **End Semester Examination (ESE)** | **Total** | **Credit** |
| | | | | **L** | **T** | **P** | **CT** | **TA** | **CT+TA** | **TE/PE** | **SW+ESE** | **Cr** |
| 1. | Mathematics-II | **T** | Major (Core) | 3 | 1 | - | 20 | 10 | **30** | **70** | **100** | **4** |
| 2. | Applied Physics-II | **T** | Major (Core) | 3 | 1 | - | 20 | 10 | **30** | **70** | **100** | **4** |
| 3. | Introduction to IT System | **T** | Major (Core) | 2 | - | - | 20 | 10 | **30** | **70** | **100** | **2** |
| 4. | Fundamentals of Electrica l& Electronic Engineering | **T** | Major (Core) | 2 | 1 | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 5. | Engineering Mechanics | **T** | Major (Core) | 3 | 1 | - | 20 | 10 | **30** | **70** | **100** | **4** |
| 6. | Environmental Sciences | **T** | Multidisciplinary | 2 | - | - | 20 | 10 | **30** | **70** | **100** | **2** |
| 7. | Applied Physics-II Lab | **P** | Minor Stream | - | - | 2 | - | 20 | **20** | **30** | **50** | **1** |
| 8. | Introduction to IT System Lab | **P** | Minor Stream | - | - | 2 | - | 20 | **20** | **30** | **50** | **1** |
| 9. | Fundamentals of Electrical Electronic Engineering Lab | **P** | Minor Stream | - | - | 2 | - | 20 | **20** | **30** | **50** | **1** |
| 10. | Engineering Mechanics Lab | **P** | Minor Stream | - | - | 2 | - | 20 | **20** | **30** | **50** | **1** |
| 11. | General Proficiency | **-** | Value Added | - | - | 2 | - | 50 | **50** | **-** | **50** | **1** |
| | **Total** | | | **15** | **4** | **10** | **120** | **190** | **310** | **540** | **850** | **24** |

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# *Polytechnic (Diploma in Engineering), Semester III*

| | | | | | | | Evaluation Scheme | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SN** | **Subject Name** | **Type** | **Category** | **Period** | | | **Sessional Component** | | **Sessional (SW) (TS/PS)** | **End Semester Examination (ESE)** | **Total** | **Credit** |
| | | | | **L** | **T** | **P** | **CT** | **TA** | **CT+TA** | **TE/PE** | **SW+ESE** | **Cr** |
| 1. | Hydraulics and hydraulic Machines | **T** | Major (core) | 3 | 1 | - | 20 | 10 | **30** | **70** | **100** | **4** |
| 2. | Communication Skill-II | **T** | Skill Enhancement | 3 | - | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 3. | AI for Everyone | **T** | Skill Enhancement | 2 | - | - | 20 | 10 | **30** | **70** | **100** | **2** |
| 4. | Concrete Technology | **T** | Major (core) | 2 | 1 | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 5. | Environmental Studies | **T** | Multidisciplinary | 2 | - | - | 20 | 10 | **30** | **70** | **100** | **2** |
| 6. | Building Construction | **T** | Major (core | 3 | 1 | - | 20 | 10 | **30** | **70** | **100** | **4** |
| 7. | Hydraulics and hydraulic LAB | **P** | Major (core) | - | - | 4 | - | 20 | **20** | **30** | **50** | **2** |
| 8. | Concrete Technology LAB | **P** | Major (core) | - | - | 2 | - | 20 | **20** | **30** | **50** | **1** |
| 9. | General Proficiency | **-** | Valu Added | - | - | 2 | - | 50 | **50** | **-** | **50** | **1** |
| | **Total** | | | **15** | **3** | **8** | **120** | **150** | **270** | **480** | **750** | **22** |

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# *Polytechnic (Diploma in Engineering), Semester IV*

| | | | | | | | Evaluation Scheme | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SN** | **SubjectName** | **Type** | **Category** | **Period** | | | **Sessional Component** | | **Sessional (SW) (TS/PS)** | **End Semester Examination (ESE)** | **Total** | **Credit** |
| | | | | **L** | **T** | **P** | **CT** | **TA** | **CT+TA** | **TE/PE** | **SW+ESE** | **Cr** |
| 1. | Industrial Training | **P** | Summer Training | - | - | - | - | - | **50** | **-** | **50** | **2** |
| 2. | Highway Engineering | **T** | Major (core) | 2 | 1 | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 3. | AI for Engineering | **T** | Major (core) | 3 | - | | 20 | 10 | **30** | **70** | **100** | **3** |
| 4. | Surveying- I | **T** | Major (core) | 2 | 1 | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 5. | Reinforced Cement Concrete Structures (RCC Structures) | **T** | Major (core) | 2 | 1 | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 6. | Energy Conservation | **T** | Ability Enhancement | 3 | - | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 7. | RCC Drawing | **T** | Major (core) | 1 | 1 | | 20 | 10 | **30** | **70** | **100** | **2** |
| 8. | Highway Engineering LAB | **P** | Major (core) | - | - | 2 | - | 20 | **20** | **30** | **50** | **1** |
| 9. | Surveying- I LAB | **P** | Major (core) | - | - | 2 | - | 20 | **20** | **30** | **50** | **1** |
| 10. | General Proficiency | **-** | Value Added | - | - | 2 | - | 50 | **50** | **-** | **50** | **1** |
| | **Total** | | | **13** | **4** | **6** | **120** | **150** | **320** | **480** | **800** | **22** |

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# *Polytechnic (Diploma in Engineering), Semester V*

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Evaluation Scheme | | | | | |
| SN | Subject Code | Subject Name | Type | Category | Period | | | Sessional Component | | Sessional (SW) (TS/PS) | End Semester Examination (ESE) | Total | Credit |
| | | | | | L | T | P | CT | TA | CT+TA | TE/PE | SW+ESE | Cr |
| 1. | CEET501 | Water and waste water Engineering | T | Major (core) | 2 | 1 | - | 20 | 10 | 30 | 70 | 100 | 3 |
| 2. | CEET502 | Building Drawings | T | Major (core | 3 | 1 | - | 20 | 10 | 30 | 70 | 100 | 4 |
| 3. | CEET503 | Soil Mechanics and Foundation Engineering | T | Major (core) | 2 | 1 | - | 20 | 10 | 30 | 70 | 100 | 3 |
| 4. | CEET504 | Surveying-II | T | Major (core) | 2 | 1 | - | 20 | 10 | 30 | 70 | 100 | 3 |
| 5. | CEET505 | Industrial Management and Entrepreneurship Development | T | Multidisciplinary | 3 | - | - | 20 | 10 | 30 | 70 | 100 | 3 |
| 6. | CEVA506 | Universal Human Values | T | Value Added | 2 | - | - | 20 | 10 | 30 | 70 | 100 | 2 |
| 7. | CESL501 | Surveying-II LAB | P | Major (core) | - | - | 2 | - | 20 | 20 | 30 | 50 | 1 |
| 8. | CEVA501 | General Proficiency | - | Value Added | - | - | 2 | - | 50 | 50 | - | 50 | 1 |
| | | **Total** | | | **14** | **4** | **4** | **120** | **130** | **250** | **450** | **700** | **20** |

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# *Polytechnic (Diploma in Engineering), Semester VI*

| | | | | | | | | Evaluation Scheme | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SN** | **Subject Code** | **Subject Name** | **Type** | **Category** | **Period** | | | **Sessional Component** | | **Sessional (SW) (TS/PS)** | **End Semester Examination (ESE)** | **Total** | **Credit** |
| | | | | | **L** | **T** | **P** | **CT** | **TA** | **CT+TA** | **TE/PE** | **SW+ESE** | **Cr** |
| 1. | CEET601 | Quantity Surveying and Valuation | **T** | Major (core) | 2 | 1 | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 2. | CEET602 | Design of Steel Structure | **T** | Major (core) | 2 | 1 | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 3. | CEET603 | Steel Structure Drawing | **T** | Major (core) | 2 | 1 | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 4. | CEET604 | Irrigation Engineering | **T** | Major (core) | 2 | - | - | 20 | 10 | **30** | **70** | **100** | **2** |
| 5. | CEET605 | Software Application in Civil Engineering | **T** | Minor Stream | 2 | - | - | 20 | 10 | **30** | **70** | **100** | **2** |
| 6. | CECA606 | Repair and Maintenance Buildings* | **T** | Major (core) | 3 | - | - | 20 | 10 | **30** | **70** | **100** | **3** |
| 7. | CEMM601 | Design of Steel Structure LAB | **P** | Major (core) | - | - | 2 | - | 20 | **20** | **30** | **50** | **1** |
| 8. | CEPW601 | Project Work | **-** | Project | - | - | 4 | - | 50 | **50** | **200** | **250** | **2** |
| 9. | CEGP601 | General Proficiency | **-** | Value Added | - | - | 2 | - | 50 | **50** | **-** | **50** | **1** |
| | | **Total** | | | **13** | **3** | **8** | **120** | **180** | **300** | **650** | **950** | **20** |

Note: - (*) Elective Subjects