## KURUKSHETRA UNIVERSITY KURUKSHETRA

## Bachelor of Technology (Electrical & Electronics Engineering) (Credit Based)

**Scheme of Studies/Examination**

**Semester III (w.e.f. session 2019-2020 )**

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| **Sr. No.** | **Course No.** | **Subject** | **L:T:P** | **Hours/Week** | **Credits** | **Examination Schedule (Marks)** | **Duration of Exam (Hrs)** |
| **Major****Test** | **Minor****Test** | **Practical** | **Total** |
| 1 | **\*EE-201A** | **Electrical Circuit Analysis** | 3:1:0 | 4 | 4 | 75 | 25 | 0 | 100 | 3 |
| 2 | BS-201A | Optics & Waves | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 3 | **\*EE-205A** | **Electrical Machines - I** | 3:1:0 | 4 | 4 | 75 | 25 | 0 | 100 | 3 |
| 4 | EEN-205A | Analog Electronics | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 5 | EEN -209A | Signals and Systems | 3:1:0 | 4 | 4 | 75 | 25 | 0 | 100 | 3 |
| 6 | **\*EE-211A** | **Electrical Machines Lab – I** | 0:0:2 | 2 | 1 | - | 40 | 60 | 100 | 3 |
| 7 | EEN -207A | Analog Electronics Lab | 0:0:2 | 2 | 1 | - | 40 | 60 | 100 | 3 |
| 8 | EEN -211A | Signal and Systems Lab | 0:0:2 | 2 | 1 | - | 40 | 60 | 100 | 3 |
| 9 | \*\*EEN-215A | Industrial Training-I | 2:0:0 | 2 | - | - | 100 | - | 100 | 3 |
| 10 | \*\*\*MC-901A | Environmental Sciences | 3:0:0 | 3 | - | 100 | - | 0 | 100 | 3 |
|  |  | **Total** |  | **29** | **21** | **375** | **245** | **180** | **800** |  |
| \* Subjects Common with III Semester. B.Tech. [Electrical Engg.] Scheme, K.U.K.\*\*EEN-215A is a mandatory credit-less course in which the students will be evaluated for the industrial training undergone after 2nd semester and students will be required to get passing marks to qualify.\*\*\*MC-901A is a mandatory credit-less course in which the students will be required to get passing marks in the major test. |

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**Scheme of Studies/Examination**

**Semester IV (w.e.f. session 2019-2020)**

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| **S.****No.** | **Course No.** | **Subject** | **L:T:P** | **Hours/ Week** | **Credits** | **Examination Schedule (Marks)** | **Duration of Exam (Hrs)** |
| **Major Test** | **Minor Test** | **Practical** | **Total** |
| 1 | BS-204A | Higher Engineering Mathematics | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 2 | HM-903A | Soft Skills & Interpersonal Communication | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 3 | **\*EE- 206A** | **Electrical Machines – II** | 3:1:0 | 4 | 4 | 75 | 25 | 0 | 100 | 3 |
| 4 | **\*EE-208A** | **Power Electronics** | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 5 | EEN-210A | Digital Electronics | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 6 | EEN -202A | Basics of Analog Communication | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 7 | **\*EE-214A** | **Electrical Machines Lab - II** | 0:0:2 | 2 | 1 | - | 40 | 60 | 100 | 3 |
| 8 | **\*EE-216A** | **Power Electronics Lab** | 0:0:2 | 2 | 1 | 0 | 40 | 60 | 100 | 3 |
| 9 | EEN-218A | Digital Electronics Lab | 0:0:2 | 2 | 1 | - | 40 | 60 | 100 | 3 |
| 10 | \*\*MC-902A | Constitution of India | 3:0:0 | 3 | - | 100 | - | 0 | 100 | 3 |
|  |  | **Total** |  | **28** | **22** | **450** | **270** | **180** | **900** |  |

\* Subjects Common with IVth Semester. B.Tech. [Electrical Engg.] Scheme, K.U.K.

\*\*MC-202A is a mandatory credit-less course in which the students will be required to get passing marks in the major test.

#### Note: All the students have to undergo 4 to 6 weeks Industrial Training after 4th semester which will be evaluated in 5th semester.

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**Bachelor of Technology (Electrical & Electronics Engineering) (Credit Based)**

**Scheme of Studies/Examination**

**Semester V (w.e.f. session 2020-2021)**

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| **S.****No.** | **Course No.** | **Subject** | **L:T:P** | **Hours/ Week** | **Credits** | **Examination Schedule (Marks)** | **Duration of Exam (Hrs.)** |
| **Major Test** | **Minor Test** | **Practical** | **Total** |
| 1 | **\*EE-301A** | **Power Systems – I** | 3:1:0 | 4 | 4 | 75 | 25 | 0 | 100 | 3 |
| 2 | **\*EE-305A** | **Control Systems** | 3:1:0 | 4 | 4 | 75 | 25 | 0 | 100 | 3 |
| 3 | EENP\*\* | Program Elective - I | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 4 | **\*EE-309A** | **Microprocessors** | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 5 | EENO\*\* | Open Elective - I | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 6 | **\*EE-313A** | **Power Systems Lab - I** | 0:0:2 | 2 | 1 | - | 40 | 60 | 100 | 3 |
| 7 | **\*EE-315A** | **Microprocessors Lab** | 0:0:2 | 2 | 1 | 0 | 40 | 60 | 100 | 3 |
| 8 | **\*EE-317A** | **Control Systems Lab** | 0:0:2 | 2 | 1 | 0 | 40 | 60 | 100 | 3 |
| 9 | \*\*\*EEN-319A | Industrial Training-II | 2:0:0 | 2 | - | - | \*100 | - | \*100 | 3 |
| 10 | \*\*\*\*MC-903A | Essence of Indian Traditional Knowledge | 3:0:0 | 3 | - | 100 | - | 0 | 100 | 3 |
|  |  | **Total** |  | **28** | **20** | **375** | **245** | **180** | **800** |  |

\* Subjects Common with Vth Semester. B.Tech. [Electrical Engg.] Scheme, K.U.K.

**\*\*The course of both Program Elective and Open Elective will be offered at 1/3rd strength or 20 students (whichever is smaller) of the section.**

\*\*\*EEN-319A is a mandatory credit-less course in which the students will be evaluated for the industrial training undergone after 4th semester and students will be required to get passing marks to qualify.

\*\*\*\*MC-903A is a mandatory credit-less course in which the students will be required to get passing marks in the major test.

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| **Course No.** | **Program Elective I**  |  | **Course No.** | **Open Elective I** |
| EENP-301A | Digital Signal Processing | EENO-301A | Computer Networks |
| EENP-303A | Electrical Machine Design | EENO-303A | Big Data Analysis |
| EENP-305A | Electromagnetic Field Theory | EENO-305A | VLSI Circuits |
| EENP-307A | Computer Architecture  | EENO-307A | Power Plant Engineering |

## KURUKSHETRA UNIVERSITY KURUKSHETRA

## Bachelor of Technology (Electrical & Electronics Engineering) (Credit Based)

**Scheme of Studies/Examination**

**Semester VI (w.e.f. session 2020-2021)**

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| **S. No.** | **Course No.** | **Subject** | **L:T:P** | **Hours/ Week** | **Credits** | **Examination Schedule (Marks)** | **Duration of Exam (Hrs.)** |
| **Major Test** | **Minor Test** | **Practical** | **Total** |
| 1 | **\*EE-302A** | **Power Systems – II**  | 3:1:0 | 4 | 4 | 75 | 25 | 0 | 100 | 3 |
| 2 | HM-901A | Organizational Behavior | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 3 | EENP\*\* | Program Elective - II | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 4 | EENO\*\* | Open Elective - II | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 5 | **\*EE-310A** | **Electrical Measurements and Measuring Instrumentation** | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 6 | **\*EE-312A** | **Power Systems Lab - II** | 0:0:2 | 2 |  1 | - | 40 | 60 | 100 | 3 |
| 7 | **\*EE-314A** | **Measurements and Instrumentation Lab** | 0:0:2 | 2 |  1 | - | 40 | 60 | 100 | 3 |
| 8 | EEN-316A | Electronic Design Lab | 0:0:4 | 4 | 2 | - | 40 | 60 | 100 | 3 |
|  |  | **Total** |  | **24** | **20** | **375** | **245** | **180** | **800** |  |

\* Subjects Common with VIth Semester. B.Tech. [Electrical Engg.] Scheme, K.U.K.

#### \*\* The course of both Program Elective and Open Elective will be offered at 1/3rd strength or 20 students (whichever is smaller) of the section. Note: All the students have to undergo 4 to 6 weeks Industrial Training after 6th semester which will be evaluated in 7th semester.

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| **Course No.** | **Program Elective II** |  | **Course No.** | **Open Elective II** |
| EENP-302A | Power System Protection | EENO-302A | Electrical Materials |
| EENP-304A | Electrical Energy Conservation and Auditing | EENO-304A | Strength of Materials |
| EENP-306A | Electromagnetic Waves and Lines | EENO-306A | Modern Manufacturing Processes |
| EENP-308A | Biomedical Signal & Image Processing | EENO-308A | Internet of Things |

**KURUKSHETRA UNIVERSITY KURUKSHETRA**

**Bachelor of Technology (Electrical & Electronics Engineering) (Credit Based)**

**Scheme of Studies/Examination**

**Semester VII (w.e.f. session 2021-2022)**

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| **S. No.** | **Course No.** | **Subject** | **L:T:P** | **Hours/ Week** | **Credits** | **Examination Schedule (Marks)** | **Duration of Exam (Hrs)** |
| **Major****Test** | **Minor****Test** | **Practical** | **Total** |
| 1 | HM- 904A | Intellectual Property Rights for Technology Development &Management | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 2 | EENP\* | Program Elective - III | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 3 | EENP\* | Program Elective - IV | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 4 | EENO\* | Open Elective - III | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 5 | EEN-401LA | Project Stage-I | 0:0:6 | 3 | 3 | - | 40 | 60 | 100 | 3 |
| 6 | \*\*EEN-403A | Industrial Training-III | 2:0:0 | 2 | - | - | \*100 | - | \*100 | 3 |
|  |  | **Total** |  | **17** | **15** | **300** | **140** | **60** | **500** |  |
| **\* The course of both Program Elective and Open Elective will be offered at 1/3rd strength or 20 students (whichever is smaller) of the section.**\*\*EEN-403A is a mandatory credit-less course in which the students will be evaluated for the industrial training undergone after 6th semester and students will be required to get passing marks to qualify. |

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| **Program Elective-III**  |  | **Program Elective-IV** |  | **Open Electives-III** |
| **Course No.** | **Course Name** | **Course No.** | **Course Name** | **Course No.** | **Course Name** |
| EENP-401A | Industrial Electrical System | EENP-407A | Electric Drives | EENO-401A | Electronic Devices |
| EENP-403A | Digital Control System | EENP-409A | Wind and Solar Energy | EENO-403A | Data Structure & Algorithms |
| EENP-405A | High Voltage Engineering | EENP-411A | Computational Electromagnetic | EENO-405A | Signal and Image Processing |
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**KURUKSHETRA UNIVERSITY KURUKSHETRA**

**Bachelor of Technology ( Electrical & Electronics Engineering) (Credit Based)**

**Scheme of Studies/Examination**

**Semester VIII (w.e.f. session 2021-2022 )**

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| **S. No.** | **Course No.** | **Subject** | **L:T:P** | **Hours/ Week** | **Credits** | **Examination Schedule (Marks)** | **Duration****of Exam. (Hrs.)** |
| **Major****Test** | **Minor****Test** | **Practical** | **Total** |
| 1 | EENP\* | Program Elective-V | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 2 | EENP\* | Program Elective-VI | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 3 | EENO\* | Open Elective-IV | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 4 | EENO\* | Open Elective-V | 3:0:0 | 3 | 3 | 75 | 25 | 0 | 100 | 3 |
| 5 | EEN-402LA | Project Stage-II | 0:0:12 | 12 | 6 | - | 40 | 60 | 100 | 3 |
|  |  | **Total** |  | **26** | **20** | **300** | **140** | **60** | **500** |  |
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| **Program Elective- V** | **Program Elective-VI** |
| **Course No.** | **Course Name** | **Course No.** | **Course Name** |
| EENP-402A | Power Quality & FACTS | EENP-408A | HVDC Transmission System |
| EENP-404A | Control System Design | EENP-410A | Power System Dynamics and Control |
| EENP-406A | Electrical & Hybrid Vehicles | EENP-412A | Advanced Electric Drives |

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| **Open Elective- IV** | **Open Elective-V** |
| **Course No.** | **Course Name** | **Course No.** | **Course Name** |
| EENO-402A | Analog & Digital Communication | EENO-408A | Mobile Communication & Networks |
| EENO-404A | Wavelets Transform | EENO-410A | Thermal and Fluid Engineering |
| EENO-406A | Embedded System | EENO-412A | Automobile Engineering |

**\*The course of both Program Elective and Open Elective will be offered at 1/3rd strength or 20 students (whichever is smaller) of the section.**