**COURSE SPECIFICATION**

|  |
| --- |
| This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification. |

|  |  |
| --- | --- |
| University of Baghdad /college of Engineering | 1. Teaching Institution |
| Electronics & Communication Department. | 2. University Department/Centre |
| Electronics II / 204 ECE | 3. Course title/code |
| Electronics III and Electronic Communication | 4. Programme(s) to which it contributes |
| In Class face-to face mode | 5. Modes of Attendance offered |
| Year 2015-2016 | 6. Semester/Year |
| 4 hrs per week/ 120 hrs total | 7. Number of hours tuition (total) |
| 21/2/2016 | 8. Date of production/revision of this specification |
| 9. Aims of the Course Studying of amplification electronic circuits(BJT and | |
| UJT). Biasing circuits, amplification circuits and using them as a switch. Analysis and design | |
| Of amplifiers. | |
|  | |
|  | |
|  | |
|  | |
|  | |
|  | |

|  |
| --- |
| 10· Learning Outcomes, Teaching ,Learning and Assessment Methode |
| 1. Knowledge and Understanding   A1. Knowledge how the transistor works as an amplifier.  A2. Knowledge how the transistor works as a switch.  A3. Knowledge how the FET works as an amplifier.  A4. Knowledge how the FET works as a switch.  A5. Knowledge the feedback concept  A6 . Knowledge the feedback amplifiers analysis |
| B. Subject-specific skills  B1.Analysis of electronic circuits.  B2.Design of electronic circuits.  B3. |
| Teaching and Learning Methods |
| 1.Theoretical lectures  2. Practical experiments.  3. Tutorials.  4. Homework and Assignments. |
| Assessment methods |
| Exams and reports |
| C. Thinking Skills  C1.Find a solution for a problem.  C2.Design a good amplifier  C3.Determine the output signal for a specified input signal to the circuit.  C4. |
| Teaching and Learning Methods |
| Theoretical lectures and practical experiments |
| Assessment methods |
| Exams and reports |

|  |
| --- |
| D. General and Transferable Skills (other skills relevant to employability and personal development)  D1.Having capability of designing  D2.Having capability of analysis.  D3.  D4. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 11. Course Structure | | | | | |
| Assessment Method | Teaching  Method | Unit/Module or Topic Title | ILOs | Hours | Week |
| exams | Theoretical & practical | Transistor Biasing |  | 16 | 4 |
| exams | theoretical | BJT stability |  | 8 | 2 |
| exams | Theoretical & practical | BJT A.C. models |  | 28 | 7 |
| exams | Theoretical & practical | UJT Biasing |  | 16 | 4 |
| exams | Theoretical & practical | UJT A.C. model |  | 28 | 7 |
| exams | Theoretical | Feedback concept |  | 8 | 2 |
| exams | Theoretical & practical | Feedback amplifier analysis |  | 8 | 2 |

|  |  |
| --- | --- |
| 12. Infrastructure | |
| 1. Integrated Electronics by Millman and Halkias. 2. Electronic Circuits by Boylested*.* | Required reading:  · CORE TEXTS  · COURSE MATERIALS  · OTHER |
| Experiments in Lab. and can use some programs to check circuit work | Special requirements (include for example workshops, periodicals, IT software, websites) |
| none | Community-based facilities  (include for example, guest  Lectures , internship , field studies) |

|  |  |
| --- | --- |
| 13. Admissions | |
| According to ministry requirements | Pre-requisites |
| 10 | Minimum number of students |
| 50 | Maximum number of students |