**COURSE SPECIFICATION**

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| 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. |

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| University of Baghdad/ College of Engineering | 1. Teaching Institution |
| Electronics and communication department | 2. University Department/Centre |
| ElectronicIII / ECE306 | 3. Course title/code |
| 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 different electronic circuits and systems such | |
| As difference amplifier ,operational amplifier and multivibrator. | |
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| 10· Learning Outcomes, Teaching ,Learning and Assessment Methode |
| 1. Knowledge and Understanding   A1.knowledge the power amplifier types.  A2.knowledge the difference amplifier.  A3.knowledge the operational amplifier concept and applications.  A4.knowledge the positive feedback.  A5.knowledge the Digital electronic systems.  A6 . |
| B. Subject-specific skills  B1.Using of different electronic circuits in the larger electronic and communication systems and applications  B2.  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.using a suitable electronic circuits in the electronic systems  C3. using a suitable electronic circuits in the communication systems  C4. |
| Teaching and Learning Methods |
| Theoretical lectures and practical experiments. |
| Assessment methods |
| Exams and reports. |

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| D. General and Transferable Skills (other skills relevant to employability and personal development)  D1. Having capability of designing and building analog electronic applications  D2. Having capability of designing and building digital electronic applications  D3.  D4. |

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| 11. Course Structure | | | | | |
| Assessment Method | Teaching  Method | Unit/Module or Topic Title | ILOs | Hours | Week |
| exam | theoretical | Power amplifiers |  | 16 | 4 |
| exam | Theoretical and practical | Difference amplifier |  | 24 | 6 |
| exam | Theoretical and practical | Operational amplifier |  | 16 | 4 |
| exam | Theoretical | Frequency response |  | 24 | 6 |
| exam | Theoretical and practical | Oscillators |  | 8 | 2 |
| exam | Theoretical and practical | Multivibrators |  | 16 | 4 |
| exam | Theoretical | Digital electronic |  | 16 | 4 |

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| 12. Infrastructure | |
| 1. **Microelectronics Digital and analog circuits and systems by Jacob Millman.** 2. **Electronic Circuits Discrete and integrated by Schilling.** | 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) |

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