**TEMPLATE FOR COURSE SPECIFICATION**

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| **Electrical machines/3rd stage/ mechanical dept.** |

**COURSE SPECIFICATION**

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| Baghdad university | ***1. Teaching Institution*** |
| Mechanical engineering department | ***2. University Department/Centre*** |
|  | ***3. Course title/code& Description*** |
| Full year subject with laboratory | ***4. Programme(s) to which itContributes*** |
| Lectures +laboratory | ***5. Modes of Attendance offered*** |
| year | ***6. Semester/Year*** |
| 2 hours for theory +2 hour practical | ***7. Number of hours tuition (total)*** |
| 18/4/2015 | ***8. Date of production/revision of this specification*** |
| ***9. Aims of the Course*** | |
| Have an idea about how the machine works and what are the parts of the machine | |

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| ***10·Learning Outcomes*** |
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| ***11.Teaching and Learning Methods*** |
| Lectures and laboratory |
| ***12. Assessment Methods***  Exams and quizzes |
| ***13. Grading Policy***    Exams and quizzes |

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| ***14. Course Structure*** | | | | | |
|  |  |  |  |  | Week |
|  |  |  |  | Parts of DC machine | 1 |
|  |  |  |  | How the machine works | 2 |
|  |  |  |  | Study the types of DC machines and their performance | 3 |
|  |  |  |  | = | 4 |
|  |  |  |  | = | 5 |
|  |  |  |  | Solving problems | 6 |
|  |  |  |  | Programming with MATLAB | 7 |
|  |  |  |  | Transformers | 8 |
|  |  |  |  | Types of transformers | 9 |
|  |  |  |  | Solving problems | 10 |
|  |  |  |  | Programming with MATLAB | 11 |
|  |  |  |  | review | 12 |
|  |  |  |  | Parts of AC machine | 13 |
|  |  |  |  | How the machine works | 14 |
|  |  |  |  | 3-phase induction motor | 15 |
|  |  |  |  | Equivalent circuit | 16 |
|  |  |  |  | Solving problems | 17 |
|  |  |  |  | = | 18 |
|  |  |  |  | Programming with MATLAB | 19 |
|  |  |  |  | 1-phase induction motor | 20 |
|  |  |  |  | Types of 1-phase induction motor | 21 |
|  |  |  |  | = | 22 |
|  |  |  |  | Solving problems | 23 |
|  |  |  |  | Programming with MATLAB | 24 |
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| ***15. Infrastructure*** | | |
| Course materials and text | Required reading:  · CORE TEXTS  · COURSE MATERIALS  · OTHER | |
| Laboratory and workshop | Special requirements (include forexample workshops, periodicals,IT software, websites) | |
|  | Community-based facilities  (include for example, guest  Lectures , internship,field studies) | |
| ***16. Admissions*** | | |
|  | | Pre-requisites |
|  | | Minimum number of students |
|  | | Maximum number of students |
| Ruba Mustafa Kamal | | ***17. Course Instructors*** |

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