

**Prince Sattam bin Abdulaziz University**

**College of Engineering at Wadi Aldawaser**

**Electrical Engineering Department**

**Course Assessment Report**

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| **Course Code** | EE2020 |
| **Course Title**  | Electric Circuit Analysis- II |
| **Level** | 5 |
| **Instructor Name** | Dr. Mukesh Kumar |
| **Academic Year** | 2015-16 |
| **Semester** | 2 |

1. **Coverage of planned Program**

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| --- | --- | --- | --- |
| **Topics covered** | **Planned contact hours** | **Actual Contact hours** | **Reason for Variations if there is a difference of more than 25% of the hours planned** |
| Introduction and review of required fundamentals; (Chapter 1) | 2 | 2 |  |
| Inductance, Capacitors (Chapter 6) | 8 | 8 |  |
| Natural response and Step response of first order RL and RC circuits, Sequential switching and Unbound response; (Chapter 7)  | 8 | 8 |  |
|  Transient analysis of Parallel and Series RLC circuits (NR & SR); (Chapter 8) | 12 | 12 |  |
| Sinusoidal steady –state analysis; (Chapter 9) | 4 | 4 |  |
| Power calculations of RLC circuits; (Chapter 10) | 8 | 8 |  |
| Resonance; Introduction to Filters, LP and HP; (Chapter 14) | 10 | 10 |  |
| Balanced Three-Phase Circuits; (Chapter11) | 4 | 4 |  |
| Total | 56 | 56 |  |

1. **Distributions of Grades**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A+** | **A** | **B+** | **B** | **C+** | **C** | **D+** | **D** | **F** | **Total** |
| **No. of Students** | 0 | 0 | 1 | 1 | 2 | 5 | 5 | 6 | 8 | 28 |
| **% of students** | 0 | 0 | 3.5 | 3.5 | 7.1 | 17.8 | 17.8 | 21 | 28.5 | 100 |
| **Cum. % of students** | 0 | 0 | 3.5 | 7 | 14.1 | 31.9 | 50.3 | 71.3 | 100 |  |
|  2.3 |

1. **Course Outcomes (CO) and Student Outcomes (SO) Assessment Results**

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| --- | --- | --- | --- |
| **Instructor** | MUKESH KUMAR | **Semester** | II 2015/ 2016 |
| **Course Code** | EE2020 | **Course Title** | ELECTRIC CIRCUIT ANALYSIS - 2 |
| **Course Outcomes** | **Student Outcomes** |
| CO | Attainment (Y/N) | % of students attaining the CO |
| a | b | c | d | e | f | g | h | i | j | k |
| CO1 | **Y** | **52** | **52** |   |   |  | **52** |   |  |   |   |   |   |
| CO2 | **N** | **26** | **26** |   |  |  | **26** |   |  |   |   |   |   |
| CO3 | **Y** | **89** | **89** |   |   |  | **89** |   |  |   |   |   |   |
| CO4 | **Y** | **59** | **59** |   | **59** |  | **59** |   |  |   |   |   |   |
| CO5 | **N** | **48** | **48** |   | **48** |  | **48** |   |  |   |   |   |   |
| CO6 | **Y** | **89** | **89** |  | **89** |  | **89** |  |  |  |  |  | 89 |
| **Student Outcome Assessment** | **60.5** |  | **65.3** |  | **60.5** |  |  |  |  |  |  **89** |
| **Bar Chart of % of students showing Satisfactory Level for CLOs** | **Bar Chart of % of students showing Satisfactory Level for SO** |
| **(i)** | **Which of the CO did not meet minimum requirement?** |
|   CO2 and CO5 did not meet the minimum requirement |
| **(ii)** | **State the reasons CO did not meet?**  |
|  * Student understanding of first order circuit and Filter design seems not good.
* The number of problems solved in the tutorial from CO5 were less.
 |
| **(iii)** | **State actions to be done to recover?** |
| * More assignments and quizzes from CO2 and CO5 need to be conducted
* More examples from these outcomes will be solved in the tutorial class.
 |

1. **Any Changes implemented in the course based on suggestions (if any) in the previous semester course report**

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| --- | --- |
| **a** | **Assessment Mechanism / Method** |
| * Minor Project based on PSPICE Simulation of Electric Circuits introduced.

*Students were asked to analyze specific problems using PSPICE and explain it to whole class through demonstration and power-point presentation.* |
| **b.** | **Teaching & Learning Methods** |
| The performance of following circuits was demonstrated using PSPICE Simulation tool.* Concept of over-damping, under-damping in series and parallel RLC Circuits.
* Frequency Selective Circuits (Filters)
 |
| **c.** | **Course Content** |
| * Circuit Simulation Tool (PSPICE) introduced.
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1. **Any other Suggestions for improvement**

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| Submitted by |  | Signature |  |
| Program Coordinator |  | Signature |  |