

APPROVED
Director of INDT
V.N. Borikov
« ____ » _____ 2015

COURSE DESCRIPTION

1. Course name Theory of Electric Circuits
2. Course code B.M10
3. Course of GEP 11.03.04 Electronics and nanoelectronics
4. Training profile (specialization, syllabus)
Industrial Electronics
5. Qualification (degree): Bachelor
6. Department in charge Industrial and Medical Electronics
of Institute of Non-Destructive Testing
7. Lecturer Yaroslavtsev Yevgeny Vitaliyevich
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9.3. Learning outcomes of the Discipline

- DR1 To solve professional tasks in the field of electric circuits;
DR2 To perform complex engineering projects in the field of electric circuits;
DR3 To present and to defend the results of engineering activity.

10. Course description

Introduction

Section 1. Time- and frequency-domain analysis of passive electric circuits. Basic concepts and definitions.

Section 2. Frequency analysis of simple electrical circuits containing one reactive element.

Section 3. Frequency analysis of simple electrical circuits containing several reactive elements.

Year 2 Semester 4 Number of credits 3

11. Prerequisites «Mathematics»; «Physics»; «Electrical Engineering»; «Vacuum, Plasma and Solid state Electronics»; «Materials and Components of Electronics».

12. Corequisites «Magnetic Elements of Electronic Devices»; «Sensing devices and metrology».

13. Type of midterm assessment credit test

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