

CURRICULAR STRUCTURE

FORM Nº 19 – **COURSE SYLLABUS/ACTIVITY**

CONTENT OF STUDIES

DIGITAL AND ANALOG ELECTRONICS

SUBJECT NAME/ACTIVITY	CODE	CONCEPTION ()
Basic Electronics Laboratory	TEE00129	ALTERATION: NAME () CL () TRANSLATION: (X)

DEPARTMENT/IMPLEMENTATION COORDINATION: ELECTRICAL ENGINEERING DEPARTMENT

COURSE LOAD: 30 HOURS THEORETICAL: 0 HOURS PRACTICAL: 30 HOURS INTERNSHIP: 0 HOURS

PROGRAM CONTENT

- 1ST PRACTICE - HOW TO USE A OSCILLOSCOPE;
- 2ND PRACTICE – DIODE CURVE;
- 3RD PRACTICE - HALF WAVE, SINGLE PHASE RECTIFIER WITH CAPACITIVE FILTER;
- 4TH PRACTICE - FULL WAVE, SINGLE PHASE RECTIFIER WITH CAPACITIVE FILTER;
- 5TH PRACTICE - STABILIZED VOLTAGE POWER SUPPLY WITH DIODES AND ZENER PARAMETERS;
- 6TH PRACTICE - STABILIZED VOLTAGE POWER SUPPLY WITH COMMERCIAL VOLTAGE REGULATORS PARAMETERS;
- 7TH PRACTICE - SLAYER AND LIMITER CIRCUITS AND THEIR TRANSFERENCE CURVES;
- 8TH PRACTICE - TRANSISTOR POLARIZATION IN COMMON EMITTER CONFIGURATION AND THEIR CHARACTERISTICS ;
- 9TH PRACTICE - TRANSISTOR USED AS A SWITCH;
- 10TH PRACTICE - FET AND MOSFET POLARIZATION;
- 11TH PRACTICE - OPERATIONAL AMPLIFIER IN INVERTER AND NON-INVERTER CONFIGURATION;
- 12TH PRACTICE OPERATIONAL AMPLIFIER AS DIFFERENTIAL AMPLIFIER;
- 13TH PRACTICE - OPERATIONAL AMPLIFIER USED AS DERIVATIVE AND INTEGRATOR;
- 14TH PRACTICE - ACTIVE FILTERS USED WITH OPERATIONAL AMPLIFIER; COMPUTATIONAL SIMULATIONS.

BASIC BIBLIOGRAPHY:

1. F.G. CAPUANO AND M.A.M.MARINO, "LABORATÓRIO DE ELETRICIDADE E ELETRÔNICA – TEORIA E PRÁTICA", Ed. ÉRICA, 24ª EDIÇÃO, 2007;
2. A.P.MALVINO, "ELETRÔNICA NO LABORATÓRIO", Ed. MAKRON BOOKS, 1992;
3. A. S. SEDRA, K. S. SMITH, "MICROELETRÔNICA" - 5ª ED. - VOLUME ÚNICO, EDITORA PHB;
4. R. L. BOYLESTAD, L. NASHESKY, "DISPOSITIVOS ELETRÔNICOS E TEORIA DE CIRCUITOS", 8ª EDIÇÃO, 2004;
5. A. M. V. CIPELLI, "TEORIA E DESENVOLVIMENTO DE PROJETOS DE CIRCUITOS ELETRÔNICOS", EDITORA ERICA, 1ª. EDIÇÃO, 2001.

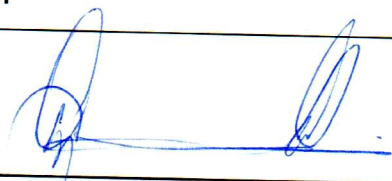


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PRÓ-REITORIA DE GRADUAÇÃO
COORDENADORIA DE APOIO AO ENSINO DE GRADUAÇÃO



COMPLEMENTARY BIBLIOGRAPHY:

1. A. PERTENCE JR, "AMPLIFICADORES OPERACIONAIS E FILTROS ATIVOS", EDITORA BOOKMAN, 7ª. EDIÇÃO, 2011;
2. L. A. BERTINI, "ELETRÔNICA BÁSICA", ANTENNA EDIÇÕES TÉCNICAS, 1ª. EDIÇÃO, 2008;
3. A. CAPELLI, "ELETRÔNICA PARA AUTOMAÇÃO", ANTENNA EDIÇÕES TÉCNICAS, 1ª. EDIÇÃO, 2007.

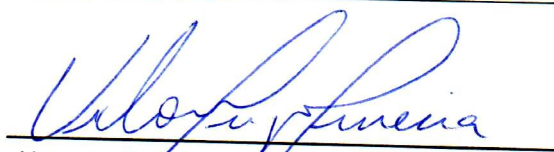


COURSE COORDINATOR

DATE 05 / 03 / 2018

November/2017

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HEAD OF ELECTRICAL ENGINEERING DEPARTMENT

DATE 05 / 03 / 2018

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