

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

CONTENT OF STUDIES

ELECTRICAL MACHINES

SUBJECT NAME/ACTIVITY	CODE	CONCEPTION ()
DC Machines and Single-Phase And Two-Phase Motors Laboratory	TEE00123	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 - SINGLE PHASE TRANSFORMER - NO LOAD WAVE FORMS AND INRUSH CURRENT;
- 2ND PRACTICE - DETERMINATION OF TRANSFORMERS PARAMETERS;
- 3RD PRACTICE - TRANSFORMERS EFFICIENCY AND REGULATION;
- 4TH PRACTICE - AUTO TRANSFORMER TESTS;
- 5TH PRACTICE - DC GENERATOR WITH INDEPENDENT FIELD AND VARIABLE LOAD;
- 6TH PRACTICE - SPEED CONTROL OF A DC MOTOR WITH CONSTANT LOAD AND ROTOR VARIABLE VOLTAGE;
- 7TH PRACTICE - DYNAMIC BRAKE OF A DC MOTOR, BY ELECTRODYNAMIC EFFECT;
- 8TH PRACTICE - SINGLE PHASE MOTOR - START WITH ONE AND TWO CAPACITOR .

BASIC BIBLIOGRAPHY:

1. A. MARTIGNONI, "ENSAIOS DE MAQUINAS ELÉTRICAS", ED. GLOBO, 2ND. EDITION, 1987;
2. L.P. BARBOSA, Q.G.SANTOS, R.P.LIMA AND V.P.BATISTA JR., "EXPERIMENTOS DE MAQUINAS ELETRICAS", AGBOOK; 1ST. EDITION, 2012;
3. FITZGERALD, A.E., KINGSLEY JR. C. E UMANS, S.D., 2006. MÁQUINAS ELÉTRICAS: COM INTRODUÇÃO À ELETRÔNICA DE POTÊNCIA. 6ª EDIÇÃO, BOOKMAN;
4. BIM, E., 2009. MÁQUINAS ELÉTRICAS E ACIONAMENTO. 2ª EDIÇÃO, EDITORA ELSEVIER;
5. CHAPMAN, S., 2010. ELECTRIC MACHINERY FUNDAMENTALS. 5TH ED., MCGRAW-HILL;
6. SEN, P.C., 1997. PRINCIPLE OF ELECTRIC MACHINES AND POWER ELECTRONICS. 2ND ED., JOHN WILEY & SONS;
7. GURU, B.S., HIZIROGLU, H.R., 2001. ELECTRIC MACHINERY AND TRANSFORMERS. 3RD ED. OXFORD UNIVERSITY PRESS.

COMPLEMENTARY BIBLIOGRAPHY:

1. MARTIGNONI, A., 2007. MAQUINAS ELÉTRICAS DE CORRENTE CONTÍNUA. 1ª EDIÇÃO, EDITORA GLOBO;
2. SLEMON, G.R., 1966. MAGNETOELECTRIC DEVICES: TRANSDUCERS, TRANSFORMERS, AND MACHINES. 1ST ED., JOHN WILEY & SONS;
3. KOSOW, I., 1986. MÁQUINAS ELÉTRICAS E TRANSFORMADORES. EDITORA GLOBO.



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COURSE COORDINATOR

DATE 05 / 03 / 2018

November/2017

Daniel Henrique N. Dias
Coordenador do Curso de
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HEAD OF ELECTRICAL ENGINEERING DEPARTMENT

DATE 05 / 03 / 2018

Prof. Vitor Hugo Ferreira, D.Sc.
Chefe do Depto. Eng. Elétrica UFF
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