UNIVERSIDADE FEDERAL FLUMINENSE
PRÓ-REITORIA DE GRADUAÇÃO
COORDENADORIA DE APOIO AO ENSINO DE GRADUAÇÃO

CURRICULAR STRUCTURE

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

CONTENT OF STUDIES

ELECTROMAGNETISM

SUBJECT NAME/ACTIVITY	CODE	CONCEPTION ( ) ALTERATION: NAME ( ) CL ( ) TRANSLATION: (X)
Electromagnetism	TEE00121	

DEPARTMENT/IMPLEMENTATION COORDINATION: ELECTRICAL ENGINEERING DEPARTMENT

COURSE LOAD: 60 HOURS THEORETICAL: 60 HOURS PRACTICAL: 0 HOURS INTERNSHIP: 0 HOURS

PROGRAM CONTENT

VECTORIAL ANALYSIS APPLIED TO ELECTROMAGNETISM; STATIONARY ELECTRIC FIELD: COULOMB'S LAW AND GAUSS' LAW; ENERGY AND ELECTRICAL POTENTIAL; ELECTRIC FIELD; DIELECTRIC AND CAPACITANCE; POISSON AND LAPLACE'S EQUATION; STATIONARY MAGNETIC FIELD; BIOT-SAVART'S LAW AND AMPERE'S LAW; MAGNETIC MATERIALS AND DEVICES; INDUCTANCE; TIME VARIABLE FIELDS, MAXWELL'S EQUATIONS.

BASIC BIBLIOGRAPHY:

1. MATTHEW N. O. SADIKU, "ELEMENTOS DE ELETROMAGNETISMO", 5ª ED. (2012), BOOKMAN;
2. WILLIAM H. HAYT JR., JOHN A. BUCK, "ELETROMAGNETISMO", MC GRAW HILL;
3. JOÃO PEDRO ASSUMPÇÃO BASTOS, "ELETROMAGNETISMO PARA ENGENHARIA: ESTÁTICA E QUASE-ESTÁTICA", UFSC;
4. JOSÉ ROBERTO CARDOSO, "ENGENHARIA ELETROMAGNÉTICA", EDITORA CAMPUS;
5. DAVID J. GRIFFITHS, "INTRODUCTION TO ELECTRODYNAMICS", 3RD EDITION, PHI LEARNING.

COMPLEMENTARY BIBLIOGRAPHY:

1. JOSEPH A. EDMINISTER, "TEORIA E PROB. DE ELETROMAGNETISMO", BOOKMAN;
2. FAWWAZ T. ULABY, "ELETROMAGNETISMO PARA ENGENHEIROS", BOOKMAN;
3. STUART M. WENTWORTH, "FUNDAMENTOS DE ELETROMAGNETISMO COM APLICAÇÕES EM ENGENHARIA", EDITORA LTC.

COURSE COORDINATOR

DATE 05 / 03 / 2018

Daniel Henrique N Dias
Coordenador do Curso de Graduação em Engª Elétrica
Matr SIAPE 1847851

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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