

CURRICULAR STRUCTURE

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

CONTENT OF STUDIES

ELECTRICAL ENERGY SYSTEMS

SUBJECT NAME/ACTIVITY
Alternative Technologies in Electrical Systems

CODE
TEE00154

CONCEPTION ()
ALTERATION: NAME () CL ()
TRANSLATION: (X)

DEPARTMENT/IMPLEMENTATION COORDINATION: ELECTRICAL ENGINEERING DEPARTMENT

COURSE LOAD: 60 HOURS

THEORETICAL: 60 HOURS

PRACTICAL: 0 HOURS

INTERNSHIP: 0 HOURS

PROGRAM CONTENT

PHOTOVOLTAIC SOLAR ENERGY; HELIOTHERMIC SOLAR ENERGY; WIND ENERGY; ENERGY FROM OCEAN TIDES; ELECTRICAL MOBILES; CELLS AND COMBUSTIBLES; NEW GRID TOPOLOGIES OF ELECTRICAL GRIDS.

BASIC BIBLIOGRAPHY:

1. EDENHOFER, O., MADRUGA, R.P., SOKONA, Y., 2012. RENEWABLE ENERGY SOURCES AND CLIMATE CHANGE MITIGATION – SPECIAL REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE. CAMBRIDGE: CAMBRIDGE UNIVERSITY PRESS;
2. HARVEY, L.D.D., 2010. ENERGY AND THE NEW REALITY 2: CARBON-FREE ENERGY SUPPLY. 1ST EDITION. LONDON: EARTHSCAN;
3. FRERIS, L., INFELD, D., 2008. RENEWABLE ENERGY IN POWER SYSTEMS. 1ST EDITION, LONDON: JOHN WILEY & SONS;
4. EHSANI, M., GAO, Y., EMADI, A., 2010. MODERN ELECTRIC, HYBRID ELECTRIC AND FUEL CELL VEHICLES: FUNDAMENTALS, THEORY AND DESIGN. 2ST EDITION, LONDON: CRC PRESS.

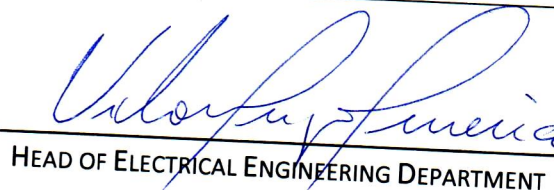
COMPLEMENTARY BIBLIOGRAPHY:

1. HODGE, B.K., 2011. SISTEMAS E APLICAÇÕES DE ENERGIA ALTERNATIVA. 1ª EDIÇÃO. RIO DE JANEIRO: LTC;
2. CGEE, 2012. CENTRO DE GESTÃO E ESTUDOS ESTRATÉGICOS, REDES ELÉTRICAS INTELIGENTES: CONTEXTO NACIONAL. RELATÓRIO TÉCNICO;
3. W. BUCKEL AND R. KLEINER, SUPERCONDUCTIVITY: FUNDAMENTALS AND APPLICATIONS, WILEY-VCH; 2ND EDITION.


COURSE COORDINATOR

DATE 24 / 01 / 2018

Daniel Henrique N. Dias
Coordenador do Curso de
Graduação em Eng^a Elétrica
Matr. SIAPE 1847851


HEAD OF ELECTRICAL ENGINEERING DEPARTMENT

DATE 23 / 01 / 2018

Prof. Vitor Hugo Ferreira, D.Sc.
Chefe do Depto. Eng. Elétrica UFF
Matr. SIAPE 1672218

November/2017