



SCHOOL PLAN

University Unit: Engineering school
Graduate program: Geospatial Sciences and Applications
Curse: [X] Academic Master [ ] Professional Master's [X] Doctorate degree
Discipline : Astroinformatics II
Teacher (s): Luciano Silva
Note: The Geospatial Science and Applications Program is multidisciplinary...
Workload: 48 h Credits: 4 [ ] Required [X] Optional [ ] Eleffective
Description: Abstract, computational and operational models. Model simulation. Fits of models parameters. Data mining in Astronomy. Basics of Machine Learning
Program content: List of themes, subjects and concepts that will be studied in the stage.
Evaluation criteria: According to the General Regulation of Stricto Sensu Post-Graduation, Art. 98: A - excellent: corresponds to grades in the interval between grades 9 and 10; B - good: corresponds to grades in the interval between grades 8 and 8.9; C - regular: corresponds to grades in the interval between grades 7 and 7.9; R - disapproved: corresponds to grades in the interval between degrees 0 and 6.9 "
Bibliography: BOSCHETTI, A., MASSARON, L. Python Data Science Fundamentals. New York: Pact Publishing, 2015. CARROLL, B.W., OSTLIE, D.A. An Introduction to Modern Astrophysics. New York: Pearson, 2006. GARRIDO, J.M. Introduction to Computational Models with Python. New York: Chapman & Hall, 2015. IVEZIC, Z., CONNOLLY, A.J., VANDERPLAS, J.T., GRAY, A. Statistics, Data Mining and Machine Learning in Astronomy: A Practical Python Guide for the Analysis of Survey Data. Princeton: Princeton University Press, 2014. KINDER, J.M., NELSON, P. A Student's Guide for Physical Modeling. Princeton: Princeton University Press, 2015. LANDAU, R.H., PÁEZ, M.J., BORDEIANU, C.C. Computational Physics: Problem Solving with Python. 3.ed. New York: Wiley, 2015. RASCHKA, S. Python Machine Learning. New York: Pact Publishing, 2015. SMITH, C.A., CAMPBELL, S.W. A First Course in Differential Equations, Modeling and Simulation. New York: CRC Press, 2011.



# UNIVERSIDADE PRESBITERIANA MACKENZIE

Pró-Reitoria de Pesquisa e Pós-Graduação  
Coordenadoria Geral de Pós-Graduação *Stricto Sensu*



Schedule	
Date	Theme