

<b>ID</b>	511
<b>Curricular Unit</b>	Programming Language
<b>Regent</b>	Carlos Alberto Rosa Ferreira
<b>Learning Outcomes</b>	The aim of the course is to introduce the most basic aspects of programming languages. The important fundamental concepts and techniques for writing programs are introduced. The ideas of the course are illustrated through programs in Microsoft Visual Basic Express Edition Language.

<b>Syllabus</b>	<p>1. Introduction to Programming:  What are programming languages?  The elements of language  Types of language  Compiler / Interpreter</p> <p>2. Logic of Programming:  Introduction  Algorithms  Data Types  Input and output operations  Structure of Control Algorithms  Vectors and Matrices  Sub-programs  Parameters</p> <p>3. Visual Basic:  Most important terminology  Brief Explanation of the Work Environment of Visual Basic Program  Understanding aspects of programming in VB  Project in VB  The most commonly used objects  Forms  Properties  Methods  Events  Type Modules  Write code in VB  Forms  Menu Editor  Variables  Arrays  Variables created by the user  Constants  Collections  Subprograms  Comparison Operators  Logical Operators  Decision-making structures  Repetition structures  Reading and writing external files  Compilation  Errors</p>
<b>Evaluation</b>	<p>Discipline is of theoretical and practical nature. Daily practice in the development of small routines computing is essential to the learning process. The evaluation is obtained alternatively by continuous evaluation or in the final exam. Continuous assessment consists of two tests. The two tests are written with practical development of small routines The Final Exam consists of a aspect theoretical and practical and in the end the student must make an oral examination.</p>
<b>Bibliography</b>	<p>A list is presented to the students.</p>