ID	2048
Curricular Unit	Programming Language
Regent	Carlos Alberto Rosa Ferreira
Learning Outcomes	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.

Syllabus	1. Introduction to Programming: What are programming languages? The elements of language Types of language Compiler / Interpreter 2. Logic of Programming: Introduction Algorithms Data Types Input and output operations Structure of Control Algorithms Vectors and Matrices Sub-programs Parameters 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
Evaluation	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.
Bibliography	A list is presented to the students.