



## COURSE DESCRIPTION

### 1. Program Information

1.1 University	“Alexandru Ioan Cuza” University of Iași
1.2 Faculty	Computer Science
1.3 Department	Computer Science
1.4 Study Domain	Computer Science
1.5 Study Cycle	Bachelor
1.6 Study Program / Qualification	Computer Science

### 2. Course Information

2.1 Course Name	MS-Office Programming						
2.2 Course Teacher	Lect. dr. Vlad Rădulescu						
2.3 Seminary Teacher	Lect. dr. Vlad Rădulescu						
2.4 Study Year	III	2.5 Semester	2	2.6 Evaluation	E	2.7 Course Status	OP

\* OB – Compulsory / OP – Optional

### 3. Total estimated hours (hours per semester and didactic activities)

3.1 Hours per week	4	in which: 3.2 course	2	3.3 seminary/laboratory	2
3.4 Hours in curriculum	56	in which: 3.5 course	28	3.6 seminary/laboratory	28
Time Distribution					hours
Manual study, Course support, Bibliography, and others					15
Supplementary Documentation in library, in electronic forums, and on the field					15
Seminaries/laboratories preparation, homeworks, reports, portfolios and essays					15
Tutoring					-
Evaluation					4
Other activities (consultations per student)					10
3.7 Total hours individual study					45
3.8 Total hours per semester					115
3.9 Credits					5

### 4. Preconditions (if necessary)

4.1 Of Curriculum	-
4.2 Of Skills	-

### 5. Conditions (if necessary)

5.1 For Course Operation	-
5.2 For Seminary/Laboratory Operation	-



## 6. Specific Skills Acquired

<b>Professional Skills</b>	<p><b>C1. The description of concepts, theories, and models used in the target domain.</b></p> <p><b>C2. The use of mathematical and computer science models and tools for solving some specific computer graphics problems.</b></p> <p><b>C3. The writing of source codes and the unitary testing of software components in a known programming language, based on some given design specification.</b></p> <p><b>C4. The identification of proper methodologies for developing software systems.</b></p>
<b>Transversal Skills</b>	<p><b>CT1. The application of the rules for a well-organized and efficient work, developing a responsible attitude towards the teaching and scientific fields, in order to achieve the creative capitalization of the student's own potential, by respecting the principles and rules of professional ethics.</b></p> <p><b>CT2. The use of efficient methods and techniques for learning, acquiring information, research and development of the capabilities to capitalize the knowledge, to adapt to the requirements of a dynamic society and to communicate in Romanian and in an international language.</b></p>

## 7. Course Objectives (from the grid of specific skills acquired)

<b>7.1 General Objectives</b>	<p>To get acquainted with the automation of operations within the main applications of the MS-Office suite.</p>
<b>7.2 Specific Objectives</b>	<p>Upon the completion of this discipline, the students will be able to:</p> <ul style="list-style-type: none"> <li>▪ Describe the main concepts related to software testing, risk analysis, test planning, assessing the quality of software projects.</li> <li>▪ Use the software testing tools.</li> <li>▪ Analyze the software projects from the point of view of the risk of defect arrival.</li> <li>▪ Plan the testing of software systems.</li> <li>▪ Take the appropriate measures for improving the development process of a software project.</li> </ul>

## 8. General Description

8.1	Course	Teaching Methods	Observations (hours and bibliographic references)
1	Introduction. The VBA programming language. The Visual Basic Editor	exposition, debate, case studies, exercise	-
2-3	Excel objects	exposition, debate, case studies, exercises	-
4-5	Word objects	exposition, debate, case studies, exercises	-
6	PowerPoint objects	exposition, debate, case studies, exercises	-
7	Dialogs	exposition, debate, case studies, exercises	-



8	Recapitulation	exposition, debate, case studies, exercises	-
9	Command bars	exposition, debate, case studies, exercises	-
10	Working with files. Controlling an MS-Office application from another one	exposition, debate, case studies, exercises	-
11	Error handling. Program debugging. Classes	exposition, debate, case studies, exercises	-
12	Excel add-ins. Word templates	exposition, debate, case studies, exercises	-
13	MDAC. Calling external libraries	exposition, debate, case studies, exercises	-
14	The COM model. OpenOffice/LibreOffice	exposition, debate, case studies, exercises	-

**Bibliography****Main references:**

P. Blattner, L. Ulrich, K. Cook, T. Dyck, *Special edition: Using Microsoft Excel 2000*, Indianapolis, IN: QUE, 1999.

**Supplementary references:**

*VBA for Office developers*: <http://msdn.microsoft.com/en-us/office/ff688774.aspx>

*Getting Started with VBA in Office 2010*:

[http://msdn.microsoft.com/en-us/library/office/ee814735\(v=office.14\).aspx](http://msdn.microsoft.com/en-us/library/office/ee814735(v=office.14).aspx)

8.2	Seminary / Laboratory	Teaching methods	Observations (hours and bibliographic references)
1	Solving the first degree equation in Excel	exposition, debate, exercises	-
2	Computing the area of a geometrical shape in Excel	exposition, debate, exercises	-
3	Organizing a new Excel workbook	exposition, debate, exercises	-
4	Solving a system of linear equations in Excel	exposition, debate, exercises	-
5	Computing the frequency of the characters in a Word document	exposition, debate, exercises	-
6	Formatting the headers and footers of a Word document	exposition, debate, exercises	-
7	Drawing a function chart in Excel	exposition, debate, exercises	-
8	Recapitulation	exposition, debate, exercises	-
9	Dialogs	exposition, debate, exercises	-
10	Automated modification of the Office menus and toolbars	exposition, debate, exercises	-



11	Interaction between Microsoft Office applications	exposition, debate, exercises	-
12	Class modules	exposition, debate, exercises	-
13-14	Working on the project	exposition, debate, exercises	-

**Bibliography**

*VBA for Office developers*: <http://msdn.microsoft.com/en-us/office/ff688774.aspx>

*Getting Started with VBA in Office 2010*:

[http://msdn.microsoft.com/en-us/library/office/ee814735\(v=office.14\).aspx](http://msdn.microsoft.com/en-us/library/office/ee814735(v=office.14).aspx)

**9. Course content synchronization with the expectations of the community representatives, professional associations and employers from the program domain**

The MS-Office suite is widely used in institutions and companies, no matter the field of activity. The knowledge and skills acquired through this course may lead to the significant improvement of the productivity for all categories of MS-Office users, especially when large volumes of data must be dealt with.

**10. Evaluation**

Activity Type	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 The weight of each evaluation form (%)
10.4 Course	the ability to apply the theoretical knowledge to solving practical problems	2 written tests	40% 20%
10.5 Seminary/ Laboratory	the ability to develop average/high complexity projects	project	50%

**10.6 Minimal performance standards**

- basic knowledge of the VBA programming language
- the ability to handle by program the main elements of the MS-Office application: documents, paragraphs, tables (Word); worksheets, formulas (Excel); slide-shows, slides, graphic objects (PowerPoint)
- being present at the laboratory classes
- the weighted average of the three results above must be at least 4.5; Gauss distribution is applied on these

Date

Course Teacher

Seminary/Laboratory Teacher

Department Date of Approval

Director of the Department