(facul	faculty stamp) COURSE DESCRIPTION		Z1-PU7	WYDANIE N1	Strona 1 z 2				
1. C	ourse title: PROGRAMMING BASICS	2. Course code							
3. Validity of course description: 2016/2017									
4. Level of studies: Eng									
5. Mode of studies: intramural studies									
6. Fi	eld of study: CHEMICAL ENGINEERING	(FACULTY SYMBOL)							
7. Profile of studies: common academic									
8. Programme:									
9. Semester: V									
10. Faculty teaching the course: Faculty of Chemical and Process Design,									
11. Course instructor: dr inż. Jacek Kocurek, dr inż. Wojciech Pudło									
12. Course classification: directional courses									
13. Course status: compulsory									
14. Language of instruction: English									
15. Pre-requisite qualifications: Podstawy informatyki i technik obliczeniowych, Matematyka									
16. Course objectives: Provide the students with computer programming principles.									
17. Description of learning outcomes:									
Nr	Learning outcomes description	Method of assessment	Teach	ing methods	Learning outcomes reference co) s ode			
1.	The student knows what are the macroinstructions in Excel, can create and use them.	Test	Laboratory		K_U02++, K_U05+++				
2.	The student can start and configure VBA compiler, knows where to type the code and how to create user-defined functions	Test	Laboratory		K_W04++ K_U05+++ K K07+				
3.	The student knows data interfaces available in Excel VBA, types of variables (simple as well as structured).	Test	Laboratory		K_U02++ K_U05+++				
4.	The student knows conditions statements, how to make error handling, jump to the label, loop statements, string functions	Test	Laboratory		K_U02++ K_U05+++				
5.	The student can create simple www page using HTML and simple text-oriented program.	Test	Laboratory		K_U02++ K_U05+++				
6.	The student understand the need to supplement ones education and professional competences and supports coworkers	Test	Laboratory		K_K01 +				
18. Leaching modes and hours									
Sem 5 - 15 h									
Sem 5 - 45 h.,									

19. Syllabus description:

The laboratory exercises provide student with advantages of creating macroinstructions in Excel. Next they shows how to start work with VBA compiler, where to type the code and required directives. The user interface allowing communication between program and user will be shown and exercised. Students will be acquainted with types of variables appearing in VBA and principles of using the variables. The simple and structured variables will be presented and exercised. The exercises will explain the use of condition statements, jump to the label, loop statements as well as error handling methods. The principles of algorithmisation will be explained on solved problems.

Students will exercise the creation of simple WWW page using text-oriented program to acquaint with basics of script languages.

20. Examination: non

21. Primary sources:									
J. Korol,Visual Basic dla aplikacji w Excelu, Mikom, Warszawa 1996 J. Walkenbach, Excel 2003 PL. Programowanie w VBA. Vademecum profesjonalisty, HELION, Gliwice 2004 K. Machej, Elementy programowania w języku BASIC i PASCAL, skrypt Pol. ŚI., Gliwice 1994									
22. Secondary sources:									
B. Danowski, Tworzenie stron WWW w praktyce. HELION, Gliwice 2007									
23. Total workload required to achieve learning outcomes									
Lp.	Teaching mode :	Contact hours / Student workload hours]						
1	Lecture	1	-						
2	Classes	1							
3	Laboratory	45/45							
4	Project	1							
5	BA/ MA Seminar	1							
6	Other	15/15							
	Total number of hours	60/60							
24. Total hours:120									
25. Number of ECTS credits: 4									
26. Number of ECTS credits allocated for contact hours: 2									
27. Number of ECTS credits allocated for in-practice hours (laboratory classes, projects): 2									
26. Comments:									

Approved:

(date, Instructor's signature)

(date , the Director of the Faculty Unit signature)