

## SYLLABUS

**1. Course title:**

Application of software packages in Chemical Engineering

**2. Code:****3. Cycle of study:**

1

**4. ECTS credits:**

4

**5. Type of course:** Mandatory  Elective**6. Prerequisites:****7. Class restrictions:****8. Duration / semester:**

1

VI

**9. Weekly contact hours:**

9.1. Lectures:

2

9.2. Seminars:

0

9.3. Laboratory/Practice classes:

2

**10. Faculty:**

Faculty of Technology

**11. Department/study program:**

Chemical Engineering and Technologies/Chemical Engineering and Technology

**12. Lecturer:**

assoc. prof. Gordan Avdić, PhD

**13. Lecturer's e-mail:**

gordan.avdic@untz.ba

**14. Web site:**

www.tf.untz.ba

**15. Course aims:**

Acquisition of knowledge of software packages in chemical engineering and their application. Students learn to identify and define problems in this area that will resolve on the basis of methodology trained in lectures and exercises.

**16. Learning outcomes:**

Knowledge and understanding of problems, engineering analysis of problems, engineering approach to problem solving, research in the field of chemical engineering, engineering practice.

**17. Course content:**

Presentation of course syllabus. Classification of software packages and basic features. Program package "MICROSOFT OFFICE", calculator program "EXCELL ". Program package "SUPERPRO DESIGNER". Programming package for process equipment elements "RHINOCEROS". Program package "POLYMATH". Program package "MATHLAB".

**18. Learning methods:**

Lectures using multimedia resources, techniques of active learning with active participation and discussion of students, laboratory exercises on computers.

**19. Assessment methods:**

After half of the semester, students write a test (first inter-exam) that covers up to date topics from lectures and exercises and can reach up to 20 points. After completing the semester, the students write a test (second inter-exam) which covers the topics covered by the lectures and exercises and can achieve a maximum of 20 points. The final exam is written. On the final exam a student answers 10 questions from the program of the subject treated in lectures and exercises. Each correct answer is scored with 5 points. The final exam can be passed if the student has won 26 points. The maximum number of points a student can achieve at the oral exam is 50.

**20. Assessment components:**

Rating exam is based on the total number of points a student earned by completing pre-exam requirements and exams, according to the quality of the acquired knowledge and skills, and contains a maximum of 100 points, and is determined according to the following scale (points):

Attendance at lectures 3  
Attendance at Exercises 4  
Student activity 3  
Tests 40  
Total prerequisites given 50  
Final Exam 26-50

**21. Required reading list:**

Microsoft Office Excell online Help, training, and additional content.  
SuperPRO Designer, User manual, Intelligen corp.  
Rhinceros, online Help and Tutorial

**22. Web sources:****23. Applicable starting from the academic year:**

2015/16

**24. Adopted in the Faculty/Academy session:**