Study program : Hotel Management and Tourism
Type and level of studies: Undergraduate academic studies, 1st level
Course unit: Applied Mathematics and Statistics
Teacher in charge: Nevena M. Vasović
Language of instruction: English
ECTS: 7
Prerequisites: No special prerequisites
Semester: I
Course unit objective: Transferring to students the necessary skills to independently use mathematical and statistical methods in the presentation of different models in the field of economic problems.
Learning outcomes of Course unit Students are ready to apply mathematical and statistical methods in the fields of business, management, economy, etc. Students have mastered the basic concepts of financial mathematics. The students adopted the methodology of statistical research and they are familiar with different types of statistical analysis.
Course unit contents **Theoretical classes:** Introduction to basic mathematical concepts. Elements of linear algebra. Differential and integral calculus. Economic functions. Financial mathematics. Introduction to statistics and basic statistical concepts. Data editing and statistical processing. Methods of descriptive statistics, random variable, probability distribution. Statistical hypotheses. Regression analysis. **Practical teaching:** Application of theoretical knowledge in order to solve open problems and tasks from the areas of economy, management, tourism, hospitality, business, etc. **Software:** Mathematica and Microsoft Excel.
Literature ● Raymond A. Barnett, Michael R. Ziegler, Karl E. Byleen. Applied Mathematics for Business, Economics, Life Science, and Social Sciences, 2003. ● Benninga, S.Financial Modeling, The MIT Press. Cambridge, Massachusetts, 2000. ● Prem S. Mann. Mann's Introductory Statistics, 9th Edition, Global Edition, 2017.

Number of active teaching hours				**Other classes**
Lectures: 3	Practice: 2	Other forms of classes:	Independent work:	

Teaching methods Traditional lecturing, seminars, individual and team activities, interactive methods in order to promote the active participation of students through discussion, case study, etc.

Examination methods (maximum 100 points)			
Exam prerequisites	**No. of points:**	**Final exam**	**No. of points:**
Student's activity during lectures	10	oral examination or written examination	40
practical classes/tests	40		
Seminars/homework		.....	
Project	10		
Other			

Grading system		
Grade	**No. of points**	**Description**
10	**91-100**	Excellent
9	**81-90**	Exceptionally good
8	**71-80**	Very good
7	**61-70**	Good
6	**51-60**	Passing
5	**0-50**	Failing

(Table 5.2) Course unit description