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| **Study programmes**: Bachelor studies – Mathematics | |
| **Course name**: Analysis of variance | |
| **Lecturers**: Jelena Jocković, Bojana Milošević, Marko Obradović | |
| **Status**: Optional | |
| **ECTS**: 5 | |
| **Attendance prerequisites**: Mathematical Statistics | |
| **Course aims**: Acquiring general and specific knowledge concerning the theory of least squares and anlysis of variance | |
| **Course outcome**: Upon completing the course, a student is qualified for applying least squares method and  analysis of variance | |
| **Content**:  The theory of least squares. Tests of hypothesis and interval estimation. Problem of single sample. One-way classified data. Two-way classified data. A general model for two-way data and variance components. The theory and application of statistical regression. The general problem of least squares with two sets of parameters. | |
| **Literature**:<br>1. С.Р. Рао: *Линейные статистические методы и их применения*, Наука, Москва, 1968.<br>2. R.J. Larsen, M.L. Marx: *An Introduction to Mathematical Statistics and Its Applications*, Pearson Education, N. Jersey, 2006. | |

| Number of hours: **5** | Lectures: **3** | Tutorials: **2** |
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**Teaching and learning methods**:  Tutorials / Lectures / Exercises

**Assessment (maximal 100 points)**

| Course assignments | points | Final exam | Points |
|---|---|---|---|
| Lectures | 10 | Written exam | 50 |
| Exercises / Tutorials | - | Oral exam | 20 |
| Colloquia | 10 | Written-oral exam | |
| Essay / Project | 10 | | |