



Politechnika Wrocławska

**Faculty of Pure and Applied Mathematics**

Field of study: Applied Mathematics

Specialty: *not applicable*

## Engineering Thesis

### **HYPOTHESIS TESTING AND ESTIMATION IN THE CASE OF FINITE POPULATION SIZE**

Kinga Kurowska

keywords:  
hypothesis testing  
confidence intervals  
medical applications

Short summary:

The problem of hypothesis testing and estimation in the case of finite population size was considered in the thesis. Two schemes of sampling, for infinite and finite population, were presented and compared. Three statistical tests were described. Simulations studies were carried out in order to compare tests. Finally, one test was chosen, which is the best for small population size.

Supervisor	dr inż. Andrzej Giniewicz		
	<i>Title, degree, name and surname</i>	<i>Grade</i>	<i>Signature</i>

*For the purposes of archival thesis qualified to: \**

- a) Category A (perpetual files)*
- b) Category BE 50 (subject to expertise after 50 years)*

*\* Delete as appropriate*

*stamp of the faculty*

Wrocław, 2017