



**LIPETSK
STATE TECHNICAL
UNIVERSITY**

Master's program
APPLIED MATHEMATICS
(Specialization – *Mathematical Modelling in Economics and Technology*)

Modules and Courses	Credits	Semester
Module 1. Main Courses		
<i>Basic part</i>		
Foreign Language for Professional Purposes	2	1
Methodology of Science	2	1
Psychology of Creativity	2	1
Communicative Competences for Business	2	1
Functional Analysis	2	3
Principles of Mathematical Models Implimentation	4	1
Integrated Corporate Information Systems	4	3
Parallel and Distributed Computing	3	1
<i>Optional Part (University's Part)</i>		
Web-Technologies	4	1
Simulational Modelling	3	3
Economic Analysis and Forecasting	4	3
Algorithms and Data Structures	4	3
IT in Quality Management	3	3
Mathematical Basics in Recurring Dynamics	4	3
Optimal Control to Non-linear Systems	3	1
Decision Theory	2	1
<i>Optional Part (Self-choice)</i>		
Quality Management Systems OR Business Processes Modeling	3	3
Intelligent Systems OR Machine Learning	3	1
Parametric Identification Algorithms OR Adaptive Identification Algorithms OR Personal Socialization	3	1
Computer Technologies in Education OR Technologies of Work Organization	3	3
Module 2. Practices and Internship		
Educational Practice	7	2
Professional Practice	7	2
Research Work	22	2,4
Pre-Diploma Internship	15	4
Module 3. State Final Examination		
Master's Thesis	9	4
TOTAL	120	