EESTI
ETTEVÕTLUSKÕRGKOOL
MAINOR

(SE-024)

(Diskreetne matemaatika ja loogika)

(Discrete mathematics and logic)

AINEKAART

Объем предмета (EAP)	5.00 ECTS
Оценивание	eristav hindamine
Цель курса и краткое описание	
Number systems. Binary hexadecimal system. Classical logics. Propositional calculus. Predicate calculus. Derivative systems. Mathematical logic. Mathematical induction. Undecidable problems. Non-completeness of arithmetic. Non-classical logic. Application of logic. Set theory. Basic operations of set theory and their properties. Set theory as analogue for mathematical logic. Basics of graph theory. Complexity. Combinatorics. Automata.	
Результаты обучения:	
Студент: 1. Knows basic laws of mathematical logic and can apply them in formula manipulations 2. Can represent functions of mathematical logic in standard form 3. Knows algorithms of minimization of standard forms 4. Can apply functions of mathematical logic in analysis of digital circuits 5. Knows basic laws of set theory and can apply them in transformation of set theory expressions 6. Is able to handle set theory as an analogue of mathematical logic 7. Knows fundamental concepts of graph theory and can apply them in solving of basic tasks in the field of graph theory	