

The Department of Mathematics

2017–18–B term

Course Name Introduction to logic and Discrete Mathematics For Computer Engineering

Course Number 201.1.9861

Course web page

<https://www.math.bgu.ac.il/en/teaching/spring2018/courses/introduction-to-logic-and-discrete-mathematics-for-computer-engineering>

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Office Hours <https://www.math.bgu.ac.il/en/teaching/hours>

Abstract

Requirements and grading¹

Course topics

Logic and Set theory: propositional calculus, boolean operators and their truth tables, truth values of formulae, logical equivalence and logical inference, tautologies and contradictions, the important tautologies, e.g., the distributive laws and De Morgan formulae. Sets: inclusion, union, intersection, difference, cartesian product, relations, equivalence relations, partial orders, linear orders, and functions. Basic Combinatorics: induction, basic counting arguments, binomial coefficients, inclusion-exclusion, recursion and, generating functions. Graphs: general notions and examples, isomorphism, connectivity, Euler graphs, trees.

¹Information may change during the first two weeks of the term. Please consult the webpage for updates