Program:

1. Real and complex (4 hrs.) Limits, completeness of the real numbers, complex numbers as points plane polar form.

2. Sequences and series of real and complex numbers (10 hrs.) Sequences convergent condition Cauchy convergence recursive sequences (examples), Bolzano-Weierstrass theorem, convergence tests, power series.

3. The functions of one variable (6 hrs.): Limit of a function at a point, one-sided limits, continuity functions (Cauchy and Heine definition), property of a continuous function on the closed section, Darboux property.

4. The derivative of the function (10 hrs.): Geometrical interpretation derivative, a composite function and inverse mean value theorem, the derivatives of higher orders, Taylor formula, extremes and the test run programs.

5. Integration (6 hrs.): Primitive function, definite integral (geometric interpretation of the original function), Riemann integral,
6. Sequences and series of functions (10 hrs.) The uniform convergence (uniform emission), power series, Taylor series, analytic functions (polynomials, exponential, etc.).
7. The function of many variables (14 hrs.): Partial derivatives, directional derivatives, the Taylor formula, extremes function of several variables, partial derivatives of the composite function, the integral multiple, assertion of the change of variables for integrals (Jacobian).