Institute Automation and information technology
Department Software Engineering

EDUCATIONAL PROGRAM
8D06102 Machine Learning & Data Science

Code and classification of the field of education: **8D06 Information and communication technologies**
Code and classification of training directions: **8D061 Information and communication technologies**
Group of educational programs: **D094 Information technology**
Level based on NQF: **8**
Level based on IQF: **8**
Study period: **3 years**
Amount of credits: **180**

Almaty 2026

The Educational Program 8D06102 Machine Learning & Data Science was approved at the meeting of the Board of Satpayev University.
Minutes No.5 from 10.03.2026.

Reviewed and recommended for approval at the meeting of the Educational and Academic Council of K.I. Satbayev Kazakh National Research Technical University
Minutes No.8 from 26.02.2026.

Reviewed and recommended for approval at the meeting of the Educational and Methodological Council of K.I. Satbayev Kazakh National Research Technical University
Minutes No.3 from 25.12.2025.

The Educational Program 8D06102 Machine Learning & Data Science was reviewed and developed at the Academic committee.
Minutes No.1 from 14.11.2025.

Passport of educational program

General information

№	Field name	Comments
1	Code and classification of the field of education	8D06 Information and communication technologies
2	Code and classification of training directions	8D061 Information and communication technologies
3	Educational program group	D094 Information technologies
4	Educational program name	8D06102 Machine Learning & Data Science
5	Short description of educational program	To provide practice-oriented training for specialists in scientific activities and production in the fields of data analysis, machine learning, and artificial intelligence. To prepare students for career prospects in academic and research activities, as well as in the industry as data analysts, software developers, machine learning engineers, and artificial intelligence researchers. To create conditions for conducting original scientific research in machine learning and data science, publishing research results in international and national peer-reviewed journals, developing and implementing machine learning algorithms to solve practical problems, and designing complex software systems for big data analysis.
6	Purpose of EP	The aim of the educational program is to train scientists capable of conducting independent research, developing comprehensive software solutions, working in a team, and being well-versed in modern aspects of artificial intelligence and data science.
7	Type of EP	New
8	The level based on NQF	8
9	The level based on IQF	8
10	Distinctive features of EP	No
11	Education form	Full-time, online
12	Period of training	3 years
13	Amount of credits	180
14	Languages of instruction	Kazakh, Russian
15	Academic degree awarded	Doctor of Philosophy (PhD)
16	Developer(s) and authors	Utegenova A.U., Kasenkhan A.M., Baimbetov D.A.