## Appendix 1 - Results of monitoring the implementation of educational programs 7M06102, 8D06102

The methodological basis for monitoring and evaluating the educational program is principles technique And the order of development of the OP.

The content and structure of educational programs (EP) of the Department of Software Engineering correspond to the state compulsory standards of higher and postgraduate education and are implemented through working curricula and working curricula, common for all forms of education.

In order to improve the effectiveness of learning outcomes, the university uses an integrated approach to monitoring and evaluating educational programs, and, accordingly, curricula for all levels of education.

Monitoring and evaluation of the educational program includes the following stages: discussion of the educational program, reviewing the educational program, revision of the educational program to take into account suggestions and comments made by employers and other stakeholders, discussion of the educational program, recommendation for approval, approval procedure.

The modular educational program is based on the graduate model developed at the university for each educational program. Verification and validation of the graduate model takes place through peer review carried out by employers.

the lists of specialized, elective and practice-oriented disciplines and modules and practices developed at the university are systematically reviewed and supplemented. The basis of the implemented courses is the results of scientific research of the teaching staff of the department.

The quality assessment of educational programs is carried out on the basis of an analysis of curricula, a catalog of elective disciplines, timetables, individual plans of students, internal regulations governing the implementation of educational programs, and questioning of students.

Educational programs go through the procedure of annual monitoring of the quality of implementation at a meeting of the department with the participation of students and teaching staff.

The teaching staff of the department, in order to harmonize the content of educational programs with similar educational programs of leading foreign and Kazakh universities, identify and analyze such universities and educational programs. Based on the results of such activities, the university concludes cooperation agreements with universities of near and far abroad.

Assessment of student satisfaction with places and organization of internship is carried out both during the internship and at the introductory and reporting conference following the results of the internship.

Evaluation of employers' satisfaction with the level of training of students is carried out by conducting their survey and questioning, as well as in the characteristics of the trainee who had an internship on the basis of the organization.

Based on the results of monitoring, decisions are made on the further development of educational programs, the expansion of the department's activities in the formation of a contingent, and the development of a unified educational space.

Evaluation of the effectiveness and efficiency of the implementation of educational programs occurs due to the feedback provided by employers, petitions, invitations of scientists abroad, expansion of the base of practice, etc.

The criterion for the effectiveness of the implementation of educational programs is the successful completion of internships by students and their further career development.

An indicator of the effectiveness of the implementation of educational programs is the high-quality graduation of students, the percentage of employment.

The results of training in educational programs are: the formation of students' competencies that are in demand on the labor market; professional activity aimed at the professional and social development of students, contributing to socialization, the formation of a common culture of the individual.

## Table - Contingent students By OP 7M06102 - "Machine Learning & Data

No.	OP	Year of	Number of students		
		admission	grant	treaty	total
1	7M06102 -	2022-2023	5	0	5
	"Machine Learning & Data Science"	2021-2022	4	0	4
		2020-2021	4	0	4
		2019-2020	12	0	12
2	8D06102 - "Machine Learning & Data Science"	2022-2023	1	0	1
		2021-2022	1	0	1
		2020-2021	4	1	5
		2019-2020	6	0	6

## Science" and 8D06102 - "Machine Learning & Data Science"