

MACHINE DATA COLLECTION

Dates: 13.12.2021 – 24.12.2021

Language of the program: English

Where: distant (edu.stankin.ru and zoom.us)

The program covers the issues of machine data collection concerning its operation and condition: how many machines worked, how much they were idle, reasons for downturn, additional information - power, energy consumption, vibration.

Solving the problem of production control enterprises are heading for Industry 4.0. The main component of it is the industrial Internet of Things. Introducing a monitoring system, enterprises create an environment for the interaction of machines via the Internet protocol, bypassing operators, which allows them to independently resolve issues of increasing efficiency and / or preventing emergency situations.

Curriculum

№	Modules	Number of hours	Class hours		Assessment
			lectures	practice	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1	Module 1. Introduction to the course, industrial revolutions	2	2	-	-
2	Module 2. Industrial protocols, control systems. Introduction to Data Acquisition from Industrial Equipment	4	2	1	test
3	Module 3. Protocols of IIoT. Examples of machine data collect systems	4	2	1	test
4	Module 4. Practical aspects of using open-source software for collecting and analyzing industrial data	4	2	1	test
5	Final assessment	3	-	3	test
	TOTAL	16	8	6	