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who has successfully completed the Joint Program for Virtual Mobility "Advanced Manufacturing: Innovations in Materials and Technologies", between Sumy State University (Ukraine), Poznan University of Technology (Poland), Technical University of Košice (Slovak Republic), and International Association for Technological Development and Innovations (Ukraine) from October 21, 2024 till December 13, 2024.

The Certificate is equal to 60 academic hours or 2.0 credits ECTS.

The Program is certified by the International Association for Technological Development and Innovations.

Dr. Nadiia KHARCHENKO, Ph.D., Sumy State University, Coordinator

Dr. Yuliia DENYSENKO, Ph.D., Poznan University of Technology, Coordinator Prof. Michal HATALA, Ph.D., Technical University of Kosice, Coordinator



#### PROGRAM CONTENT

TOTAL (hours)	6
Final Test	2
Student-Lecturer Scientific Discussions	8
Self-Study	20
Simulation of Manufactiuring Systems	2
Application of Artificial Intelligence in Manufacturing Processes	2
Tool Wear in Cutting Theory	2
Using Markov Chains in the Manufacturing Engineering	2
Advanced Polymer Materials in Additive Production for Bioengineering	2
Navigating Quality Management in Agile Manufacturing: Strategies for Effective Reporting	2
The Role of Engineers in Sustainable Development	2
3D Printing for Surgery Medicine	2
Empowering Rehabilitation: Medical Knowledge Through 3D Manufacturing	2
Modern Approaches to Predicting the Properties of Multicomponent Materials	2
Thermal Phenomena in the Cutting Process	2
ISO System for Tolerances and Fits	2
Cutting Force During Machining	2
TIPS Methodology as a Tool for Finding Solutions to Technical Contradictions and Introducing Innovations	2
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Date: December 20, 2024

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