

Online Summer School Course in “Sustainable manufacturing in Industry 4.0: technologies and solutions”

co-organized by the Norwegian University of Science and Technology (NTNU) and
National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” (KPI)

SCHEDULE OVERVIEW:

Monday Sept 14th		Tuesday Sept 15th		Wednesday Sept 16 th		Thursday Sept 17th	
Time	Module	Time	Module	Time	Module	Time	Module
14:15-18:00	Introduction to Industry 4.0 and Sustainable Manufacturing	14:15-18:00	Industry 4 and Manufacturing Management	14:15-18:00	Product Development	14:15-18:00	Additive Manufacturing Technologies

*All times are shown in **Kyiv local time** (GMT+03:00)*

Lecture materials will be made available online after the conclusion of the course at ipd.kpi.ua

ACADEMIC PROGRAM:

Start	End	Module	Lectures	Speaker(s)/Organization
DAY 1 (Monday, September 14th)				
14:15	14:35	Introduction to Industry 4.0 and Sustainable Manufacturing	Opening the Summer School	Vitalii Pasichnyk/ KPI
14:35	15:00		Introduction to the Summer School and the project	Niels Peter Østbø /NTNU
15:05	15:50		Virtual tour of the enterprise "Smart Metal Processing"	Andriy Navruzov / Smart Metal Processing
16:00	16:45		Enterprise modelling and architecture for Industry 4.0	Niels Peter Østbø/ NTNU -
16:50	17:35		Machine vision systems in the context of Industry 4.0	Oleksandr Semeniuta/ NTNU
17:40	18:00		Wrap-up of the day, discussion	Oleksandr Semeniuta/ NTNU

DAY 2 (Thursday, September 15th)				
14:15	15:00	Industry 4 and Manufacturing Management	Transformation of the socio-economic system in the conditions of Industry 4.0	Serhii Voitko/ KPI
15:05	15:50		Investments Efficiency in Industry 4.0	Natalia Skorobogatova/ KPI
16:00	16:45		Competition 4.0	Anna Kukharuk/ KPI
16:50	17:35		Successful technological projects: expert opinion	Iryna Fedorenko/ NeCF
17:40	18:00		Wrap-up of the day, discussion	Anna Kukharuk/ KPI
DAY 3 (Wednesday, September 16th)				
14:15	15:00	Product Development	Product development based on needs, wants, and wishes of the customers	Olena Korohodova/ KPI
15:05	15:50		Design for Manufacturing and Assembly	Yuliia Lashyna/ KPI
16:00	16:45		Advanced Materials	Anatoliy Minitzky and Ievgen Byba/ KPI

16:50	17:35		NTNU Learning Factory Presentation	Niels Peter Østbø and colleagues / NTNU
17:40	18:00		Wrap-up of the day, discussion	Yuliia Lashyna/ KPI
DAY 4 (Thursday, September 17th)				
14:15	15:00	Additive Manufacturing Technologies	Quality control and management in additive manufacturing	Ivanna Baturynska/ NTNU
15:05	15:50		Cyber security for additive manufacturing	Ivanna Baturynska/ NTNU
16:00	16:45		Features of 3D printing of shaped surfaces, their location in the working environment and placing supports (part 1)	Dmytro Krasnovyd/ KPI
16:50	17:35		Features of 3D printing of shaped surfaces, their location in the working environment and placing supports (part 2)	Dmytro Krasnovyd/ KPI -
17:40	18:00		Summer school closing	Project participants