ALAR

ONLINE SUMMER SCHOOL

DIGITALIZATION IN ENERGY INDUSTRY

JULY 20 — AUGUST 01, 2020

DIGITAL TRENDS IN OIL &GAS COMPLEX, NUCLEAR, ELECTRICAL AND POWER PLANT INDUSTRY - JOIN THIS ONLINE SUMMER SCHOOL
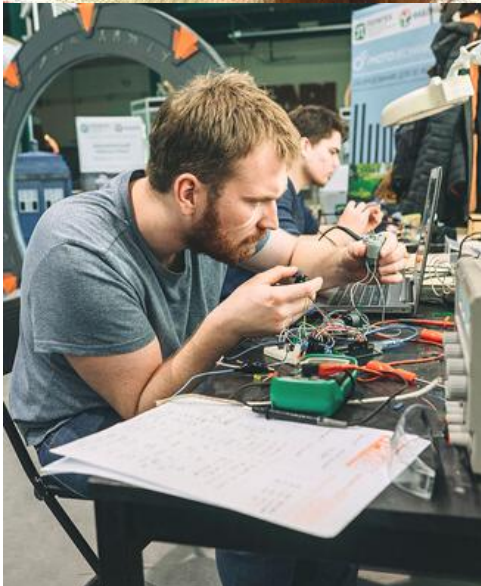
ECTS credits: 4.0

POLYTECH
Peter the Great
St.Petersburg Polytechnic
University

BRIEF DESCRIPTION

Summer School Digitalization in Energy Industry will provide an immersion into the world of Digital technologies in electrical engineering and power engineering.

The course includes different topics on Digitalization in Energy Industry, its tendencies and problems, new elaborations and projects.

Part of the course will include information on Digital Transformation in Oil&Gas Complex and in Nuclear Industry.

Cost:
US$450- includes registration, teaching costs, 4.0 ECTS credits Certificate, 40 hours online russian language course and ALAR's Certificate

Enroll NOW

Program dates: JULY 20 — August 01, 2020

Registration deadline: July 04th, 2020

Entrance requirements:
. Good command of English
. All classes and out-of-class activities are conducted in English
. Knowledge of the Russian language is not required
. Applicants are expected to have at least 2 year of University level studies.

Professors and lecturers:
SPbPU professors, leading international professors and guest speakers from companies

Course and calendar description
Please find attached curricula and calendar at the end of this document

Program partners:
- Gazprom Transgaz Gazprom
- Neft Surgutneftegaz (Kirishi oil refinery)
- Rosenergoatom Rosseti

Enroll NOW

DIGITALIZATION IN ENERGY INDUSTRY

TIME	MON JULY 20th	TUE JULY 21st	WED JULY 22nd	THU JULY 23rd	FRI JULY 24th	SAT JULY 25th	SUN JULY 26th
10:00 10:15 10:30 10:45 **11:00**	Digital Technologies in Energy Industry	Renewables and SMART Grids	Application of digitalization in nuclear industry	Introduction to machine learning Application in oil and gas industry	Application of machine learning techniques to geophysical well' log data		
11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break		
11:30 11:45 **12:00** 12:15 12:30 12:45	Digital Technologies in Energy Industry	Renewables and SMART Grids	Application of digitalization in nuclear industry	Introduction to machine learning Application in oil and gas industry	Application of machine learning techniques to geophysical well' log data		
13:00 13:15	Consultation	Consultation	Consultation	Consultation	Consultation		
13:30 13:45							
14:00 14:15 14:30 14:45	Cultural Programme: Lesson 1 *	Cultural Programme: Lesson 2*	Campus Tour	Cultural Programme: Lesson 3*	Cultural Programme: Lesson 4*		Cultural Programme: Lesson 5*
TBA					Live-chat		Live-chat
TBA						White Nights Live	

DIGITALIZATION
IN ENERGY INDUSTRY

TIME	MON JULY 27th	TUE JULY 28th	WED JULY 29th	THU JULY 30th	FRI JULY 31st	SAT AUG 1st	SUN AUG 2nd
10:00 / 10:15 / 10:30 / 10:45 / 11:00	Digital technologies in RES	CFD for Turbomachinery	Introduction to MATLAB/ Simulink	Code generation in MATLAB/ Simulink	Simulation of thermal schemes of TPP for the application in information systems		
11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break		
11:30 / 11:45 / 12:00 / 12:15 / 12:30 / 12:45	Digital technologies in RES	CFD for Turbomachinery	MATLAB/ Simulink Support Package for Microcontrollers Project development	External connection of Microcontroller with Simulink	Simulation of thermal schemes of TPP for the application in information systems		
13:00 / 13:15	Consultation	Consultation	Consultation	Consultation	Consultation		
13:30 / 13:45							
14:00 / 14:15 / 14:30 / 14:45	Cultural Programme: Lesson 6*	Sport Day	Cultural Programme: Lesson 7*	Cultural Programme: Lesson 8*	Cultural Programme: Lesson 9*		
TBA			Live-chat		Closing Ceremony		
TBA						White Nights Live	

* - Recommended timing for Cultural Programme   **TBA** - To Be Announced