## National Technical University of Ukraine ''Kyiv Polytechnic Institute''

Department of machinery and apparatus chemical and petroleum industries

APPROVED
Head of Department MACPI
Y.N. Kornienko
September 16, 2015

### INDIVIDUAL EDUCATIONAL PLAN

specialty 8.05050315 "Equipment for Chemical Productions and Construction

Materials Plants"

specialization "Machinery and equipment of chemical and petroleum industries"
student V of the course the group LN- 51m

# Yashchuk Vitalii Olexandrovich in 2015/2016 academic year

Scientific adviser: associate professor machinery and devices chemical and petroleum industries, candidate of technical sciences Andreev I.A.

Theme of master's thesis:

"The process of vibration extrusion fiber concretes mine puffs"

## Implementation of curriculum for a master

№	Name of credit modules	Number of ECTS credits	Type reporting	Note		
Осінній семестр						
1.	Civil Defence	1	Differential test			
2.	Intellectual Property	1	Test			
3.	Design Engineering Equipment – 1	7	Exam			
4.	Academic Year Project within the Subject: Design Engineering Equipment.	1,5	Course project			
5.	Foreign Language for Specific Purposes -1	1,5	_			
6.	Computer Design of Chemical Manufactures Equipment	2	Test			
7.	Mounting and Maintenance of Chemical Manufactures Equipment	2,5	Test			
8.	Automation of Productive Processes – 1. Local System of Automated Regulation	4	Differential test			
9.	Fundamentals of Marketing	1,5	Test			
10.	Equipment for the Production and Processing of Polymers - 1. Equipment of production of polymers	4	Exam			
11.	Synthesis and separation equipment in the chemical industry - 1. Equipment for membrane separation processes	4	Exam			
Весн	няний семестр					
1.	Specialized Labor Safety	1	Differential test			
2.	Factors of Successful Employment According to Specialization	1	Test			
3.	Fundamentals of Scientific Researches	2	Test			
4.	Foreign Language for Specific Purposes - 1	1,5	Test			
5.	Higher School Pedagogy	1,5	Test			
6.	Transfer Processes white Equipping of Chemical Manufactures-1. Processes of oil-processing productions	3	Test			
7.	Academic Year Project within the Subject -1: Processes of oil-processing productions	1,5	Course project			
8.	Manufacturing Technology, Reliability and Durability -1. Design of processes of transfer	5	Exam			
9.	Automation of Productive Processes – 2. Automated Process Control System	4	Exam			
10.	Processes of Deep Refrigeration	4,5	Test			
11.	Equipment for the Production and Processing of Polymers - 2. Extrusion methods of processing ofpolymers	3,5	Exam			
12.	Synthesis and Separation Equipment in the Chemical Industry-2. An equipment of synthesis is in chemical industry	3,5	Exam			

### Research work

1.	The analysis of literature and patent sources for studying the process of vibro-extrusion fiber-reinforced concrete. The	Division thesis.	
	formulation of the political problems of the theory and experimental research.		15.10.15
2.	Preparation of materials research results for publication of abstracts and the conference.	Abstracts.	15.11.15
3.	Development of a physical model of vibro-extrusion fiber-reinforced concrete. Preparing a patent application.	Division thesis.  The patent application	30.12.15
4.	Selection and justification of mathematical model of vibro- extrusion fiber concretes mine puffs and methods for solving this mathematical model.	Division thesis.	28.02.16
5.	Preparation of materials to the research article to be published in professional journals and abstracts for publication and participate in the conference.	Abstracts. An article in the scientific journal.	30.04.16
6.	The solution of a mathematical model of vibro-extrusion fiber concretes mine puffs.	Division thesis.	30.06.16

Pedagogical and educational work

1.	Assistance SRWS in section "Processes and equipment of chemical and	During training
	oil industries"	

## Scientific adviser

Associate professor MACPI, candidate of technical sciences I.A. Andreev

Masters V.O. Yashchuk

Approved at the department meeting MACPI Protocol № 2 dated September 16, 2015