

**CURRICULUM OF  
TECHNOLOGIES OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY EDUCATION SPECIALTY  
“MASTER’S” DEGREE – PART-TIME**

Code	Discipline	Semester	Form of evaluation		Curricular load				Extracurricular load	Total number of credits
			Exam	OA	Total hours	Lectures	Seminars/Practical seminars	Observation+on going practice	Hours	
	<b>MANDATORY DISCIPLINES</b>									
1.	Mathematical and logical fundamentals of computer systems	I	+		30	10	20		90	4,8
2.	Introduction to information systems and technologies	I	+		30	20	10		90	4,8
3.	The modern educational paradigm	I	+		15	10	5		45	2,4
4.	Basics of programming	II	+		30	20	10		90	4,8
5.	Selected questions from the school computer science course	II	+		35	10	15	10	105	5,6
6.	Selected questions from the school IT course	II	+		35	10	15	10	105	5,6
7.	Methodology of CSIT training	II	+		30	10	10	10	90	4,8
8.	Technologies and methodology of e-learning	III	+		30	20	10		90	4,8
9.	Web systems and technologies	III	+		30	20	10		90	4,8
10.	Methodology and methods of pedagogical research	III	+		15	10	5		45	2,4
11.	Specialized statistical software	III.	+		30	20	10		90	4,8
	<b>TOTAL:</b>				<b>310</b>	<b>160</b>	<b>120</b>	<b>30</b>	<b>930</b>	<b>49.6</b>
	<b>ELECTIVE DISCIPLINES</b>									
	<b>FIRST GROUP – pedagogical, psychological and specific didactic</b>									
1.	Educational computer games in CSIT training			+	15	10	5		45	2,4
2.	Event-driven programming			+	15	10	5		45	2,4
3.	Computer security			+	15	10	5		45	2,4
4.	Specialized educational software for primary school			+	15		15		45	2,4
5.	High-tech tools for CSEN			+	15	10	5		45	2,4

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6.	Methodological aspects of CM training in the initial stage			+	15	10	5		45	2,4
	<b>SECOND GROUP – interdisciplinary and applied-experimental, oriented to key competencies and related to the professional and pedagogical realization of teachers</b>									
1.	Interactive methods in CSITE			+	15	10	5		45	2,4
2.	Image processing when working with specialized software			+	15	10	5		45	2,4
3.	Mastering basic legal literacy			+	15	10	5		45	2,4
4.	Teacher career development management			+	15	10	5		45	2,4
5.	Project management			+	15		15		45	2,4
6.	Integrative possibilities of information technology education in junior high school and high school stage			+	15	10	5		45	2,4
	<b>OPTIONAL DISCIPLINES</b>									
1.	Virtual learning environments			+	15	10	5		45	2,4
2.	Communicative strategies in education			+	15		15		45	2,4
3.	Website design and creation			+	15		15		45	2,4
4.	Methodology and technologies for development and application of e-tests			+	15		15		45	2,4
5.	Work on projects on the Internet			+	15		15		45	2,4
6.	Electronic accessibility and internet addiction			+	15		15		45	2,4

## SUMMARIZED DATA OF THE CURRICULUM

### I. Relative share of the disciplines in the curriculum

Teaching load	Disciplines		Hours	
	number	%	num.of hours	%
<i>1. Mandatory disciplines</i>	11	55%	<b>310</b>	69,7%
1.1. With a lecture course	11	55%	<b>310</b>	69,7%
<i>2. Elective disciplines</i>	6	30%	<b>90</b>	20,2%
<i>3. Optional disciplines</i>	3	15%	<b>45</b>	10,1%
<b>ОБЩО</b>	<b>20</b>	<b>100%</b>	<b>445</b>	<b>100%</b>

#### *Ratio between the disciplines:*

1. By number: (elective + optional) / mandatory - **1:1,22 (9/11)**
2. By hours: (elective + optional) / mandatory - **1:2,3 (135/310)**

### II. Teaching staff

1. Total number of lecturers teaching mandatory and elective courses:	11
2. Relative share of the full-time habilitated lecturers from the general scientific teaching staff:	(11/12) 91,67%
3. The relative share of the proposed lecture courses, given by the full-time habilitated lecturers from the total number of lecture courses is:	95,45% (21/22)

### III. Forms of inspection and evaluation

Forms	Number
1. Exams	11
2. Ongoing assessment	9

#### **The training ends with:**

1. Final state (practical-applied) examination and
2. Final state theoretical examination or diploma thesis defence

#### IV. ACCUMULATION OF CREDITS

1. Basis for the formation of 1 credit - **25 hours** of student load
2. Each discipline provides accumulation of credits from curricular and extracurricular student load
3. Credits from curricular and extracurricular load – **78,4 credits**
4. Final state examination or diploma thesis defence – **15 credits**

**Total number of credits - 93,4**

<b>Учебни дисциплини</b>	<b>Curricular load (num. of hours)</b>	<b>Credits</b>
1. Mandatory disciplines (11 disciplines)	310	49,6
2. Elective disciplines (6 disciplines)	90	14,4
3. Optional disciplines (3 disciplines)	45	7,2
4. Internship	45	7,2
5. Final state theoretical examination /Diploma thesis		15
<b>Total:</b>	<b>490</b>	<b>93,4</b>