UNIVERSITY OF PLOVDIV "PAISII HILENDARSKI"

FACULTY OF CHEMISTRY

CONFIRM:

Dean: Rector:

(Assoc. Prof. K. Kunchev) (Full Prof. I. Kutsarov)

Faculty Board Minutes № 63 / 21. 11. 2003

Academic Board Minutes № 27 / 24. 11. 2003

CURRICULA

AREA OF HIGHER EDUCATION:	Chemical Sciences
PROFESSIONAL STREAM:	Chemistry (4.2)
SPECIALITY:	Computer Chemistry
DEGREE:	Bachelor
PROFESSIONAL QUALIFICATION:	Chemist - Computer Chemist
MODE OF STUDY:	Full-time
DURATION OF PROGRAM:	4 years

Discipline	Type	Hours per week L / S / Pc	CH	ST	Total	TA	ECTS
FIRST ACADEMIC YEAR							
I semester							
1. General and Inorganic Chemistry - I	C	4 / 1 / 3	120	180	300	E	10
2. General Physics - I	C	2 / 0 / 3	75	105	180	E	6
3. Linear Algebra and Analytical Geometry	C	2 / 2 / 0	60	90	150	E	5
4. Mathematical Analysis – I	C	2 / 2 / 0	60	90	150	E	5
5. English	C	0 / 2 / 0	30	60	90	CA	3
6. Sport	C	0 / 2 / 0	30	0	30	CA	1
Total:		**25**	**375**		**900**		**30**

Abbreviations:

Type: C – compulsory; E – elective; F – facultative

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ECTS – credits

Discipline	Type	Hours per week L / S / Pc	CH	ST	Total	TA	ECTS
II semester							
1. General and Inorganic Chemistry - II	C	4 / 1 / 3	120	180	300	E	10
2. General Physics - II	C	3 / 0 / 3	90	150	240	E	8
3. Mathematical Analysis - II	C	2 / 2 / 0	60	90	150	E	5
4. Computers and Software	C	2 / 0 / 2	60	90	150	E	5
5. English / Sport / Philosophy	F	0 / 2 / 0	30	30	60	CA	2
Total:		**24**	**360**		**900**		**30**
III semester							
1. Analytical Chemistry - I	C	3 / 0 / 5	120	150	270	E	9
2. Organic Chemistry – I	C	4 / 1 / 3	120	150	270	E	9
3. Chemical Informatics	C	2 / 0 / 3	75	105	180	E	6
4. Structure of the Substance	C	2 / 0 / 1	45	75	120	E	4
5. English / Sport / Philosophy	F	0 / 2 / 0	30	30	60	CA	2
Total:		**26**	**390**		**900**		**30**
IV semester							
1. Organic Chemistry – II	C	4 / 0 / 3	105	165	270	E	9
2. Analytical Chemistry - II	C	2 / 0 / 5	105	165	270	E	9
3. Databases and Basis of Programming	C	2 / 0 / 2	60	90	150	E	5
4. Statistic and Metrology in Chemistry	C	2 / 0 / 2	60	90	150	E	5
5. English / Sport / Philosophy	F	0 / 2 / 0	30	30	60	CA	2
Total:		**24**	**360**		**900**		**30**
V semester							
1. Physical and Colloids Chemistry – I	C	3 / 2 / 2	105	135	240	E	8
2. Instrumental Methods of Analysis	C	3 / 0 / 4	105	135	240	E	8
3. Algorithms and Object-Oriented Programming	C	1 / 0 / 2	45	105	150	E	5
4. Chemometry	C	2 / 0 / 2	60	90	150	E	5
5. Elective Course (chemistry)	E	2 / 0 / 0	30	30	60	E	2
6. English / Sport / Philosophy	F	0 / 2 / 0	30	30	60	CA	2
Total:		**25**	**375**		**900**		**30**

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Discipline	Type	Hours per week L / S / Pc	CH	ST	Total	TA	ECTS
VI semester							
1. Physical and Colloids Chemistry – II	C	3 / 2 / 2	105	195	300	E	10
2. Quantum Chemistry Methods	C	3 / 0 / 2	75	105	180	E	6
3. Computer Modelling in Chemistry	C	3 / 0 / 2	75	105	180	E	6
4. Biochemistry	C	2 / 0 / 3	75	105	180	E	6
5. English / Sport / Philosophy	F	0 / 2 / 0	30	30	60	CA	2
Total:		**24**	**360**		**900**		**30**
VII semester							
1. Bioinformatics	C	3 / 0 / 3	90	150	240	E	8
2. Applied Inorganic Chemistry	C	2 / 0 / 2	60	90	150	E	5
3. Computer Design of Biologically Active Substances	C	2 / 0 / 2	60	90	150	E	5
4. Elective Course (chemistry)	E	2 / 0 / 2	60	90	150	E	5
5. Elective Course (computer science)	E	2 / 0 / 2	60	90	150	E	5
6. English / Sport / Philosophy	F	0 / 2 / 0	30	30	60	CA	2
Total:		**24**	**360**		**900**		**30**
VIII semester							
1. Applied Organic Chemistry	C	2 / 0 / 2	60	60	120	E	4
2. Ecology and Protection of Environment	C	2 / 0 / 2	60	60	120	E	4
3. Elective Course (computer science)	E	2 / 0 / 2	60	60	120	E	4
4. Elective Course (chemistry)	E	2 / 0 / 2	60	60	120	E	4
5. Polimer Chemistry	C	2 / 0 / 2	60	60	120	E	4
6. English / Sport / Philosophy	F	0 / 2 / 0	30	30	60	CA	2
Total:		**22**	**330**		**660**		**22**
Total for study:		**180**	**2910**				**232**
State exam / Defence of a thesis paper:							**15**
TOTAL:		**180**	**2910**				**247**

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ELECTIVE COURSES *:

Chemistry:

1. Chemistry of Drugs
2. Material Science
3. Food chemistry
4. Catalysis
5. Spectrochemistry Analysis of Pure Substances
6. Molecular Biology
7. Chemical Toxicology
8. Contemporary Chromatography Methods
9. Biologicalli Active Metal Complexes
10. Computer methods in Polimer Chemistry
11. Geochemistry

Computer Science:

1. Programming and Algorithms
2. OC-Linux (Unix) and applications
3. Graph Theory
4. Theory of the Groups and Symmetry
5. Network and Internet
6. Artificial neural network
7. Combinatory chemistry
8. Computer Access to Science Information

FACULTATIVE COURSE *:

1. English
2. Sport
3. Philosophy

* - Each year are endorsed by the Faculty Board

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