#### NATIONAL AVIATION UNIVERSITY

#### **Educational and Research Institute of Humanities**

Foreign Languages and Applied Linguistics Department

AGREED		APPROVEI	)
Director of ER IIDS		Vice-Rector	for Academics
	S.Filonenko	and Educati	ve Activity
,,	2017		T. Ivanova
		« <u></u> »	2017



Quality Management System

#### **COURSE TRAINING PROGRAM**

on

### "Foreign Language for Specific Purpose"

Field of study: 15 "Automation and instrumentation"

Speciality: 151 "Automation and computer-integrated technologies"

Specialization: "Computer-integrated technological processes

of production"

Year of Study  $-2^{nd}$ ,  $3^{rd}$  Semester  $-3^{rd}$ ,  $4^{th}$ ,  $5^{th}$ ,  $6^{th}$ 

Practicals -134 Graded Test  $-3^{rd}$ ,  $4^{th}$ ,  $5^{th}$ ,  $6^{th}$  semester

Self-study - 106
Total (hours/ECTS and its) 240

 $Total\ (hours/ECTS\ credits) - 240/8$ 

Index ECB-14-151/16-3.1



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The Course Training Program on "Foreign Language for based on the Bachelor Extended Curriculum № ECB-14-151/1 "Automation and Computer-integrated Technologies" and Speci integrated Technological Processes of Production", Syllabus for CB-5-192/16-3.1, approved "" 2017 normative documents.	6 for Speciality 151 alization "Computer- or this Subject, Index
Developed by:	
Senior Lecturer of the Foreign Languages and Applied Linguistics Department	S.Soroka
Discussed and approved by the Foreign Languages and Department, Record № of 2017.	Applied Linguistics
Head of the Department	O. Shostak
Discussed and approved by the Graduate Departmen 151"Automation and Computer-integrated Technologies" "Computer-integrated Technological Processes of Production Aviation Computer-integrated Complexes, Minutes J. 2017.	and Specialization " - Department of
Head of the Department	V.Sineglazov
Discussed and approved by the Scientific-Methodologic the Educational and Research Humanities Institute, M	
Head of SMEB	_ S. Yahodzinskyi
Director of the Center	
Of Advanced Technologies	V. Kazak

 $\begin{aligned} & Document \ level-3b \\ & The \ planned \ term \ between \ the \ revisions-1 \ year \\ & \textbf{Master copy} \end{aligned}$ 



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#### 1. INRODUCTION

The Course Training Program on the subject is developed on the basis of syllabus "Foreign Language for Specific Purpose" and "Methodical instructions for development and preparation of a syllabus and a course training program of subjects" adopted on 16.06.2015 by №37/order.

#### 2. SUBJECT CONTENT

#### 2.1. Training schedule of the subject

component of hi-techs	Total 3  Internet' 4 4 3 3 4 4 3 3 3	Total 4  2 2 2 2 2 2 2 2 2 2	Total 5  2 2 1 1 2 2 1 1		
3 semester  Module №1 "Modern Technologies. The  1.1 The Internet's History. The Infinitive  1.2 WWW and the Internet. The functions of the Infinitive in the sentence  1.3 The global network in modern life  1.4 The Internet and education. WIKI sites. The complex Object  1.5 Web engines, web sites, web pages, web servers  1.6 Modern technologies in our life. The Complex Subject  1.7 Hi-tech and the Internet technologies  1.8 Robototechnics and atomic energetic. The Gerund  1.9 Aircraft building and space crafting as the component of hi-techs  1.10 Data. Informatics. Information technologies. The	3 3 4 4 3	2 2 2 2 2 2 2	2 2 1 1 2 2		
Module №1 "Modern Technologies. The  1.1 The Internet's History. The Infinitive  1.2 WWW and the Internet. The functions of the Infinitive in the sentence  1.3 The global network in modern life  1.4 The Internet and education. WIKI sites. The complex Object  1.5 Web engines, web sites, web pages, web servers  1.6 Modern technologies in our life. The Complex Subject  1.7 Hi-tech and the Internet technologies  1.8 Robototechnics and atomic energetic. The Gerund  1.9 Aircraft building and space crafting as the component of hi-techs  1.10 Data. Informatics. Information technologies. The	4 4 3 3 4 4 3	2 2 2 2 2 2 2	2 1 1 2 2 2		
Module №1 "Modern Technologies. The  1.1 The Internet's History. The Infinitive  1.2 WWW and the Internet. The functions of the Infinitive in the sentence  1.3 The global network in modern life  1.4 The Internet and education. WIKI sites. The complex Object  1.5 Web engines, web sites, web pages, web servers  1.6 Modern technologies in our life. The Complex Subject  1.7 Hi-tech and the Internet technologies  1.8 Robototechnics and atomic energetic. The Gerund  1.9 Aircraft building and space crafting as the component of hi-techs  1.10 Data. Informatics. Information technologies. The	4 4 3 3 4 4 3	2 2 2 2 2 2 2	2 1 1 2 2 2		
<ul> <li>The Internet's History. The Infinitive</li> <li>1.2 WWW and the Internet. The functions of the Infinitive in the sentence</li> <li>1.3 The global network in modern life</li> <li>1.4 The Internet and education. WIKI sites. The complex Object</li> <li>1.5 Web engines, web sites, web pages, web servers</li> <li>1.6 Modern technologies in our life. The Complex Subject</li> <li>1.7 Hi-tech and the Internet technologies</li> <li>1.8 Robototechnics and atomic energetic. The Gerund</li> <li>1.9 Aircraft building and space crafting as the component of hi-techs</li> <li>1.10 Data. Informatics. Information technologies. The</li> </ul>	4 4 3 3 4 4 3	2 2 2 2 2 2 2	2 1 1 2 2 2		
1.2 WWW and the Internet. The functions of the Infinitive in the sentence 1.3 The global network in modern life 1.4 The Internet and education. WIKI sites. The complex Object 1.5 Web engines, web sites, web pages, web servers 1.6 Modern technologies in our life. The Complex Subject 1.7 Hi-tech and the Internet technologies 1.8 Robototechnics and atomic energetic. The Gerund 1.9 Aircraft building and space crafting as the component of hi-techs 1.10 Data. Informatics. Information technologies. The	3 3 4 4 3	2 2 2 2 2 2	2 1 1 2 2 2		
Infinitive in the sentence  1.3 The global network in modern life  1.4 The Internet and education. WIKI sites. The complex Object  1.5 Web engines, web sites, web pages, web servers  1.6 Modern technologies in our life. The Complex Subject  1.7 Hi-tech and the Internet technologies  1.8 Robototechnics and atomic energetic. The Gerund  1.9 Aircraft building and space crafting as the component of hi-techs  1.10 Data. Informatics. Information technologies. The	3 3 4 4 3	2 2 2 2 2	1 1 2 2 2		
1.4 The Internet and education. WIKI sites. The complex Object  1.5 Web engines, web sites, web pages, web servers  1.6 Modern technologies in our life. The Complex Subject  1.7 Hi-tech and the Internet technologies  1.8 Robototechnics and atomic energetic. The Gerund  1.9 Aircraft building and space crafting as the component of hi-techs  1.10 Data. Informatics. Information technologies. The	3 4 4 3	2 2 2 2	1 2 2 1		
complex Object  1.5 Web engines, web sites, web pages, web servers  1.6 Modern technologies in our life. The Complex Subject  1.7 Hi-tech and the Internet technologies  1.8 Robototechnics and atomic energetic. The Gerund  1.9 Aircraft building and space crafting as the component of hi-techs  1.10 Data. Informatics. Information technologies. The	4 4 3	2 2 2	2 2 1		
<ul> <li>1.5 Web engines, web sites, web pages, web servers</li> <li>1.6 Modern technologies in our life. The Complex Subject</li> <li>1.7 Hi-tech and the Internet technologies</li> <li>1.8 Robototechnics and atomic energetic. The Gerund</li> <li>1.9 Aircraft building and space crafting as the component of hi-techs</li> <li>1.10 Data. Informatics. Information technologies. The</li> </ul>	3	2	2		
<ul> <li>1.6 Modern technologies in our life. The Complex Subject</li> <li>1.7 Hi-tech and the Internet technologies</li> <li>1.8 Robototechnics and atomic energetic. The Gerund</li> <li>1.9 Aircraft building and space crafting as the component of hi-techs</li> <li>1.10 Data. Informatics. Information technologies. The</li> </ul>	3	2	1		
<ul> <li>1.7 Hi-tech and the Internet technologies</li> <li>1.8 Robototechnics and atomic energetic. The Gerund</li> <li>1.9 Aircraft building and space crafting as the component of hi-techs</li> <li>1.10 Data. Informatics. Information technologies. The</li> </ul>	_				
<ul><li>1.9 Aircraft building and space crafting as the component of hi-techs</li><li>1.10 Data. Informatics. Information technologies. The</li></ul>	3	2			
component of hi-techs 1.10 Data. Informatics. Information technologies. The		2	1		
1.10 Data. Informatics. Information technologies. The					
	1.10 Data. Informatics. Information technologies. The 4 2				
1.11 Data. Informatics and data products	3	2	1		
1.12 Information technologies and data products	3	2	1		
.13 Architecture of DBMS 4 2 2					
1.14 Software for data processing	3	2	1		
1.15 Scientific Software	3	2	1		
1.16 Presentation on topic	4	2	2		
1.17 Module test №1.	4	2	2		
Total for Module №1	60	34	26		
Total for the 3 <sup>rd</sup> semester 60 34 26					



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	Module № 2 "Biometrics. Biometric	: Devices'	•				
2.1	Biometrics. The Participle I	4	2	2			
2.2	Biometrical systems 4 2 2						
2.3	Biometrical systems of data protection	3	2	1			
2.4	Biometrical scanner. The Participle II	3	2	1			
2.5	Biometrical identification	4	2	2			
2.6	Biometrical identification and its static methods	4	2	2			
2.7	2.7 Biometrical identification and its dynamic 3 2 1 methods						
2.8	Biometric devices in our life	3	2	1			
2.9	Types and classes of biometric sensors and systems. The Participle constructions	4	2	2			
2.10	Chemical biometric devices	4	2	2			
2.11	Visual biometric devices	3	2	1			
2.12	Behavior biometric devices. The Gerund, Paerticiple I, Participle II. Typology	3	2	1			
2.13	Audio biometric devices	4	2	2			
2.14	4 Biometric systems in personal gadgets 3 2 1						
2.15	5 Biometric documents 3 2 1						
2.16	16 Presentation on topic 4 2 2						
2.17							
<b>Total for Module №2</b> 60 34 26							
Total for the 4 <sup>th</sup> semester 60 34 26							
Total for the 2 <sup>nd</sup> year         120         68         52							
	Total for the 2 <sup>nd</sup> year	120	68				
	Total for the 2 <sup>nd</sup> year  3 Year	120	68				
	3 Year 5 semester		68				
	3 Year 5 semester Module №3 "Artificial Intelligent	,,		52			
3.1	3 Year 5 semester		2				
3.1 3.2	3 Year 5 semester Module №3 "Artificial Intelligent	,,		52			
	3 Year  5 semester  Module №3 "Artificial Intelligent  Artificial Intelligent. The Conditional Mood  History of Artificial Intelligent. The Conditional	" 4	2	2			
3.2	5 semester  Module №3 "Artificial Intelligent  Artificial Intelligent. The Conditional Mood  History of Artificial Intelligent. The Conditional Mood I  Artificial Intelligent as the branch of computer linguistics and informatics. The Conditional Mood	" 4 4	2 2	2 2			
3.2 3.3 3.4 3.5	5 semester  Module №3 "Artificial Intelligent  Artificial Intelligent. The Conditional Mood  History of Artificial Intelligent. The Conditional Mood I  Artificial Intelligent as the branch of computer linguistics and informatics. The Conditional Mood II  Computer teaching as a part of Artificial Intelligent  Computer Vision	" 4 4 3	2 2 2	2 2 2			
3.2 3.3 3.4	5 semester  Module №3 "Artificial Intelligent  Artificial Intelligent. The Conditional Mood  History of Artificial Intelligent. The Conditional Mood I  Artificial Intelligent as the branch of computer linguistics and informatics. The Conditional Mood II  Computer teaching as a part of Artificial Intelligent	" 4 4 3	2 2 2	2 2 1			
3.2 3.3 3.4 3.5	5 semester  Module №3 "Artificial Intelligent  Artificial Intelligent. The Conditional Mood  History of Artificial Intelligent. The Conditional Mood I  Artificial Intelligent as the branch of computer linguistics and informatics. The Conditional Mood II  Computer teaching as a part of Artificial Intelligent  Computer Vision	" 4 4 3 4 4	2 2 2 2 2 2	2 2 1 1 2			
3.2 3.3 3.4 3.5 3.6	5 semester  Module №3 "Artificial Intelligent  Artificial Intelligent. The Conditional Mood  History of Artificial Intelligent. The Conditional Mood I  Artificial Intelligent as the branch of computer linguistics and informatics. The Conditional Mood II  Computer teaching as a part of Artificial Intelligent  Computer Vision  Artificial Intelligent and its status  The usage and future development of Artificial	" 4 3 3 4 4	2 2 2 2 2 2 2	2 2 1 1 2 2 2			
3.2 3.3 3.4 3.5 3.6 3.7	5 semester  Module №3 "Artificial Intelligent  Artificial Intelligent. The Conditional Mood  History of Artificial Intelligent. The Conditional Mood I  Artificial Intelligent as the branch of computer linguistics and informatics. The Conditional Mood II  Computer teaching as a part of Artificial Intelligent  Computer Vision  Artificial Intelligent and its status  The usage and future development of Artificial Intelligent	3 3 4 4 3	2 2 2 2 2 2 2	2 2 1 1 2 2 1			



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3.11	Nanomaterials. The grammar constructions with "I wish", "If only"	3	2	1		
3.12	Nanoconductors. The grammar constructions with "I wish I were"	3	2	1		
3.13	Nanotecnologies and their unique characteristics	4	2	2		
3.14	Nanotecnologies and their unique characteristics. The grammar constructions with "I wishwould"	3	2	1		
3.15	Society's attitude to nanotechnologies. The grammar constructions with "I wishhad been"	3	2	1		
3.16	Presentation on topic	4	2	2		
3.17	Module test №3.	4	2	2		
0117	Total for Module №3	60	34	26		
	Total for the 5 <sup>th</sup> semester	60	34	26		
	6 semester					
	Module №4 "Computer Viruses. Antiviru	s Progran	nmes "			
4.1	Computer virus	4	2	2		
4.2	History of creation of the first computer virus	4	2	2		
4.3	Types and names of computer viruses. The Modal Verbs "Can", "Could" and their equivalents					
4.4	Features of infected computers. The Modal Verbs "May", "Might" and their equivalents	4	2	2		
4.5	Boot viruses, file viruses, invisible viruses, retro viruses, computer worms and others. The Modal Verbs "Must", "Have to"	4	2	2		
4.6	Types of antivirus programmes	4	2	2		
4.7	Antivirus programmes. Detection. The Modal Verbs "Should", "Ought to"	3	2	1		
4.8	Antivirus programmes. Treating. "Need"	3	2	1		
4.9	Antivirus programmes. Revisions . The Modal Verbs "Shall", "Will"	4	2	2		
4.10	Antivirus programmes. Filtration Modal verbs to express permission	4	2	2		
4.11	Antivirus programmes. Vaccination . Modal verbs to expressduty, necessity, order, advice and prohibition	4	2	2		
4.12	Cyberspace	3	2	1		
4.13	Cybercrimes	3	2	2		
4.14	Cyber terrorism. Modal verbs to express logical supposition	4	2	2		
4.15			2	2		
4.16	Module test №4.	4	2	2		
	Total for Module №4  Total for the 6 <sup>th</sup> semester  Total for 3 <sup>rd</sup> year	60 60 120	32 32 66	28 28 54		



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Total for the Subject	240	134	106

#### 3. BASIC CONCEPTS OF GUIDANCE ON THE SUBJECT

#### 3.1. List of references

#### **Basic literature**

- 3.1.1. Шостак О.Г. Professional English: Information Technology Language: підруч. / О.Г. Шостак, Б.В. Бистрова, О.В. Сарсадських. К.: «Талком», 2014. 374с.
- 3.1.2. Dictionary of Physics / Edited by Valerie H. Pitt. Longman Group Ltd, 2001. 368 p.
- 3.1.3. Tamzen, Armer. Cambridge English for Scientists. Cambridge : Cambridge University Press, 2011. 128 p.
  - 3.1.4. Virginia Evans. Round Up 5. Grammar book. Longman, 2004. 210 p.

#### **Additional literature**

- 3.2.1. Crowell, Benjamin. Electricity and Magnetism. Fullerton, California, 2002. 166 p.
  - 3.2.2. Crowell, Benjamin. Optics. Fullerton, California, 2001. 98 p.
- 3.2.3. David Millar, Ian Millar, John Millar and Margaret Millar. The Cambridge Dictionary of Scientists. 2 edition. New York: Cambridge University Press, 2002. 428 p.
- 3.2.4. Deeson, Eric. Collins Internet-linked Dictionary of Physics. London : Harper Collins Publishers Ltd, 2007. 538 p.
- 3.2.5. Foley Mark & Hall Diane. My Grammar Lab. Grammar book. Intermediate B1–B2. Pearson Publishing House, 2012. 385 p.
- 3.2.6. Hewitt, P. Conceptual Physics.  $9^{th}$  edition. Boston: Pearson Prentice Hall, 2009.-480~p.
- 3.2.7. Ibbotson M. Professional English in Use. Engineering. Technical English for professionals. Cambridge: Cambridge University Press, 2009. 144 p.
- 3.2.8. Jewett, Serway. Physics for Scientists and Engineers. 6<sup>th</sup> edition. California : California State Polytechnic University, 2004. 1284 p.

#### 3.2. List of basic guidance materials for the subject

No	Name	Index of Topics where Guides are Used	Amount
1.	Video extracts on topics "Modern technologies in our life", "Biometrics", "Nanotechnologies"	1.6-1.7, 2.1-2.8, 3.9-3.13	Electronic copy
2.	Audio dialogues on topics "Artificial Intelligence"	1.1, 1.8	Electronic copy
3	Table of Conditional Sentences	3.1-3.9	1 Soft Copy



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#### 4. RATING SYSTEM OF KNOWLEDGE AND SKILLS ASSESSMENT

4.1. Grading of different kinds of academic work performed by a student is done in accordance with Table 4.1.

Table 4.1

3–6 semester		
Module №1-4		3.5
Kind of Academic Activities	Max Grade	Max Grade
Text Reading and Translation (8 texts x 3 grades)	24 (total)	
Knowledge of Terms	3	
Text Retelling (4 texts x 5 grades) 20 (total)		
Article Translation and Retelling 5		
Discussion of the Topic 4		
Knowledge of Grammar (testing) 5		
Preparing a Presentation on the topic 7		
A student is to gain not less than 41 grades to be allowed to write Module Test №1-4		
Module Test №1-4 20		
Total for Module №1–4	88	
Semester Graded Test		12
Total Semester Grade		100

- 4.2. A student is considered to have passed the module if both his/her Current Module Grade and Module Test Grade are positive (see Table 4.2).
- 4.3. The grades a student has been given for different kinds of academic work are summed up and the result constituting a Current Module Grade is entered into the Module Grade Register.

Table 4.2
Correspondence between the Grades for different kinds of activities
and the National Scale

		and the Ivativ	onai ocaic		
	Grades			N. 1.1 T.	
Text Reading and Translation,	Text Retelling, Article Translation and Retelling,	Discussion of the Topic	Preparing a Presentati	Module Test grade	National Scale
Knowledge of Terms	<u> </u>	•	on on the topic	M №1–4	
3	5	4	7	18–20	Excellent
2,5	4	3	6	15–17	Good
2	3	2,5	4–5	12–14	Satisfactory
under 2	under 3	under 2,5	under 4	under 12	Bad



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4.4. The sum of the Current Module Grade and the Module Test Grade is the Total Module Grade (Table 4.3) whose grades and the National Scale is entered into the Module Grade Register.

Table 4.3 Correspondence between the Total Module Grades and the National Scale

Module №1-4	National Scale
79-88	Excellent
66-78	Good
53-65	Satisfactory
under 53	Bad

4.5. The Semester Module Grade is calculated as the sum of the Total Module Grades. The correspondence between Semester Module Grade values and the National Scale is given in Table 4.4.

Table 4.4. Correspondence between the Semester Module Grades and the National Scale

Table 4.5 Correspondence between the Graded Test Grades and the National Scale

Grades	National Scale
79-88	Excellent
66-78	Good
53-65	Satisfactory
under 53	Bad

Grades	National Scale
Graded test	
12	Excellent
10	Good
8	Satisfactory
-	_

4.6. The Semester Module Grade and the Graded Test Grades together make up a Total Semester Grade whose correspondence to the National Scale and the ECTS Scale is shown in Table 4.6.

Table 4.6 Correspondence of the Total Semester Grades to the National Scale and the ECTS System

System					
Total			ECTS System		
Semester	National Scale	ECTS	Evalenation		
Grades		Grade	Explanation		
90-100	Excellent	A	Excellent (excellent performance with insignificant shortcomings)		
82-89	few mistakes)		(performance above the average standard with a		
75-81	Good	C	Good (good performance altogether with a certain number of significant mistakes)		
67-74	Satisfactory	D Satisfactory (performance meets the average standard			



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60-66		E	Sufficient (performance meets the minimal criteria)
35-59		FX	Bad (bad performance; a second testing is required)
1-34	Unsatisfactory	F	Bad (very bad performance; a student shall retake the course)

- 4.7. The Total Semester Grade is entered into the Examination Register and into a student's record book in grades, National Scale grades, and ECTS grades.
- 4.8. The Total Semester Grade is entered into a student's record book, for example: 92/Ex/A, 87/Good/B, 79/Good/C, 68/Sat/D, 65/Sat./E, etc.
- 4.9. The Total Semester Grades of discipline are defined as the average arithmetic grade of the total semester grades in points (from the first to the sixth semesters for this subject) with its transfer into National Scale and ECTS Scale.

The indicated Total Semester Grade of the subject is entered in the Diploma Supplement.



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 $(\Phi 03.02 - 01)$ 

### АРКУШ ПОШИРЕННЯ ДОКУМЕНТА

<b>№</b> прим.	Куди передано (підрозділ)	Дата видачі	П.І.Б. отримувача	Підпис отримувача	Примітки
	_				
	_				

 $(\Phi 03.02 - 02)$ 

АРКУШ ОЗНАЙОМЛЕННЯ З ЛОКУМЕНТОМ

	АРКУШ ОЗНАИОМЛЕННЯ З ДОКУМЕНТОМ							
No		Підпис	Дата					
	Прізвище ім'я по-батькові	ознайомленої	ознайом-	Примітки				
пор.		особи	лення					



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 $(\Phi 03.02 - 04)$ 

### АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ

№ пор.	Прізвище ім'я по-батькові	Дата ревізії	Підпис	Висновок щодо адекватності

 $(\Phi \ 03.02 - 03)$ 

#### АРКУШ ОБЛІКУ ЗМІН

№	№ листа (сторінки)			436731314	Дата	Дата	
зміни	Зміненого	Заміненого	Нового	Анульо- ваного	яка внесла	внесення зміни	введення зміни

 $(\Phi \ 03.02 - 32)$ 

### УЗГОДЖЕННЯ ЗМІН

	Підпис	Ініціали, прізвище	Посада	Дата
Розробник				
Узгоджено				
Узгоджено				
Узгоджено				