

Ministry of Education and Science of Ukraine
The National Metallurgical Academy of Ukraine
Faculty of Computer Systems, Power Engineering and
Automation

EUROPEAN CREDIT TRANSFER SYSTEM (ECTS)

Brief Notes

**Branch 0925 –Automation
and Computer Technologies**

Speciality 092501 – Automation management
of technological processes

NMetAU

2006

Introduction

The European Community encourages, and assists in, the cooperation between universities as a method for improving upon the quality of higher education, and it regards student-exchange programmes as an essential part of this work. The prerequisite for an integrated European Higher Education Area, which facilitates student and teacher mobility between universities in the countries concerned, is the academic recognition of courses, qualifications, and diplomas. One such tool for this recognition is the European Credit Transfer System (ECTS) – a system of evaluation which approves and recognizes the transfer of credits between educational institutions. This tool creates transparency by building bridges between institutions and enlarges the options available to students. The system enables easier evaluation of student achievement, as it is a standardized form in which students may be categorized. The system also adds to the integration of a national system of higher education.

ECTS is based on three key aspects:

- The information regarding educational programmes and the evaluation of student achievement.
- The mutual agreement between an educational institution and a student.
- The use of the ECTS for the calculation of academic work hours per course.

A credit (ECTS) is the value used to measure a student's workload. This workload includes not only academic hours, such as lectures, seminar, practical classes, consulting classes (tutorials), but also manufacturing practice, academic hours for student preparation, tests and relevant preparation, and other forms of evaluative activities. 36 academic hours is required for one credit. In accordance with the ECTS system, a student workload for one academic year is 60 credits.

The Ukrainian national system of higher education meets the main requirements of the Bologna Declaration, specifying the use of a credit-modular system (curriculum modularization) based on modular techniques and international values of learning-result estimations.

Accordingly, the material of each academic discipline is divided into modules. At the National Metallurgical Academy of Ukraine (NMetAU), every modular credit is evaluated on a 12-point scale. The total student workload required to complete the course, described by the 12-point scale, is equal to one credit. Since 2004, NMetAU has pursued the instruction of specialists in accordance with the Bologna Declaration.

Learning Outcomes Evaluation Table for Conversion from National to ECTS Systems

Mark			Explanations	Percentage
4-point scale	12-point scale*	ECTS scale		
Unsatisfactory	1	FX	Unsatisfactory (thorough and elaborate recurrence of the entire course is necessary)	-
	2	F	Unsatisfactory (elaborate recurrence of the course material is necessary in order to receive a passing credit)	-
	3			
Satisfactory	4	E	Satisfactory (quality of knowledge satisfies the minimal criteria)	10
	5			
	6	D	Satisfactory (acceptable, but many drawbacks)	25
7				
Good	8	C	Good (in general the work is correct, but possesses a definite amount of significant mistakes)	30
	9			
	Excellent	10	B	Very Well (advanced work with some mistakes)
11				
12		A	Excellent (excellent performance with a negligible amount of mistakes)	10

* - Used in the National Metallurgical Academy of Ukraine (NMetAU)

I – Institution of Higher Education

A. Name and Address

National Metallurgical Academy of Ukraine

Address: Gagarin av. 4, Dnipropetrovsk, Ukraine 49600,

Rector – Prof., Dr. **Oleksandr Grygorovych** Velychko

Tel.: (380562) 45-31-56, (380562) 41-02-00

Fax: (380562) 47-44-61

E-mail: dmeti@dmeti.dp.ua

B. Academic Year

Organization Schedule of Learning: four semesters

Every academic year has a 52 (including vacations) week workload.

The beginning of the academic year is the 1st of September

semester	I										II															
Week Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				
																					vac	vac				
semester	III										IV															
Week Number	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
																					vac	vac	vac	vac	vac	vac

- Theoretical instruction and evaluative activity (passing of modular credits)

vac - Vacations

Manufacturing practice: 4 weeks after the 12th semester (43rd - 46th week of student workload)

State examination for a Bachelor Degree: after course IV completion (within the 43rd and 44th week of the student workload).

ECTS coordinators in NMetAU

Dr., Prof. **Volodymir Ivanovich Shatokha** –Vice-Rector on scientific and teaching activity, responsible for international relations of NMetAU.

Address: Gagarina Ave. 4, Dnipropetrovsk, Ukraine 49600

Tel.. (380562) 47-44-33

(380562) 41-01-33 from 10 am until 2 pm (Kiev time)

E-mail: shatokha@metal.dmeti.dp.ua

Oleg Ukhymovich Potap – Docent, Candidate of Science (comparable to the academic degree of Doctor of Philosophy, Ph.D.)

Address: Gagarina Ave. 4, Dnipropetrovsk, Ukraine 49600

Tel. (380562) 41-02-46 from 10 am until 2 pm (Kiev time)

E-mail: dmeti@dmeti.dp.ua

History of NMetAU

The National Metallurgical Academy of Ukraine (NMetAU) is one of the oldest institutions of higher education for metallurgical engineering. It was established in October, 1899 as a department of Katerinoslavsky Higher Mining School. In 1912, the department was transformed into a metallurgical faculty of Katerinoslavsky Mining Institute. In 1930, it acquired the status of an independent institution of higher education and obtained the name of Dnipropetrovsk Metallurgical Institute. In 1993, the higher status of State Metallurgical Academy of Ukraine was gained and fixed by the Resolution of Cabinet of Ministers of Ukraine and, in 1999, the status of the National Metallurgical Academy of Ukraine was adopted by the Ukaz (Decree) of the President of Ukraine.

The establishment and development of NMetAU, with its scientific and teaching schools, is directly connected with the development of industry, science, and education in Ukraine. The world famous Academicians and Corresponding Members of National Academy of Science are associated with NMetAU, they are: L.V. Pisarzhevsky, M.A. Pavlov, A.V. Kirsanov, O.P. Chekmar'ov, U.M. Taran-Zhovnir, M.I. Gasik, K.F. Starodubov, P.T. Yemelyanenko, K.P. Bunin,

S.N. Kozhevnikov, V.I. Bol'shakov, V.I. Babtizansky and others. The institution is engaged in the development of the applied sciences of Ukraine, such as: metals and alloys manufacturing, casting practice, metal forming, materials science, heating engineering, mechanics, chemistry, etc.

Presently, the National Metallurgical Academy of Ukraine is a state institution of higher education with level IV accreditation and developed infrastructure. NMetAU carries out the teaching activity for all qualification degrees (junior specialist, bachelor, specialist and master) in 16 branches and over 60 specialities; instructs university teachers and scientists for higher academic degrees (Ph.D and higher) in 22 specialities; conducts preparatory training and gives a second degree in higher education.

The Academy consists of 7 full-time faculties (Faculty of Metallurgy, Faculty of Electrometallurgy, Faculty of Mechanics and Machine-Building, Faculty of Material Science and Metal Forming, Faculty of Economics and Management, Faculty of Computer Systems, Power Engineering and Automation, Faculty of Humanities), a part-time (evening studies) faculty and extramural (by correspondence and interview) faculty. NMetAU includes:

- Krivorizky Metallurgical faculty.
- Nikopolsky faculty.
- Krivorizky technical school.
- Krivorizky Metallurgical technical school.
- Nikopolsky technical school.
- Vilnogirsky technical school.
- Novomoskovsky technical school.
- Scientific and experimental laboratories and shops.
- Aspiranture (post-graduate department).
- Doctoranture (further studies after Ph.D.).

Apart from the above mentioned, there is also the Regional Education Center for Disadvantaged Students, State Institute of Personnel Training for Manufacturing Industry, a Library, Faculty of Professional Skills Improvement for Teachers and

Specialists, Specialist Re-training Faculty, Faculty for Foreign Student Instruction, Pre-university Preliminary Faculty. Preliminary Courses for NMetAU applicants, Student Sanatorium and the “Druzhba” Sports Camp are available at the academy. Five comfortable hostels provide accommodation for all students who came to study, both from other Ukrainian cities, and from abroad.

Presently, the National Metallurgical Academy of Ukraine instructs around 15,000 students, 175 post-graduate students and 10 scientists, who researches towards the second academic degree of a Doctor (studies after Candidate degree). Around 1,000 teachers and scientists work at NMetAU. The majority of whom possess post-graduate academic degrees (Candidate and Doctor Degrees) and 14% of the teaching staff have doctorates. A Member and a Corresponding Member of the National Academy of Science of Ukraine carries out lectures in NMetAU. 25 teachers are Members of different regional Academies of Ukraine and work as their Corresponding Members. 16 teachers gained the status of Honoured Science Workers, Honoured Teachers and won the National Awards.

13 scientific schools in various fields are developed within the National Metallurgical Academy of Ukraine. The Dnipropetrovsk School of Theoretical and Applied Materials Science, Ukrainian Fundamental School of Electrometallurgical Engineers and Heat-Treaters are well-known in Ukraine and abroad as well as scientific schools of steel metallurgy and pig iron metallurgy, heat engineering, heat-and-power engineering, metallurgical equipment, metal forming technologies and others.

On the bases of international contracts, programmes, projects and grants, NMetAU collaborates with scientists and firms from the USA, German, Sweden, Finland, Italy, China, Russia, Moldova and other countries. The Academy stipulated the creation of a Consortium of 5 technical universities: German-Sweden-Finland-Poland-Ukraine. The integrated teaching programme for the Metallurgy branch was developed in relation to it. The students and post-graduate students of NMetAU study at the advanced technical universities of Europe, have their probationary period in the

institutions of higher education, scientific and research institutes, and firms in the in the EC countries.

Faculty Structure and List of Specialities

Faculty	
Department	Speciality
Faculty of Metallurgy	
Pig iron metallurgy	Metallurgy of ferrous metals (Pig iron metallurgy) ^{xx}
Steel metallurgy	Metallurgy of ferrous metals (Steel metallurgy) ^{xx}
Theory of metallurgical processes and physical chemistry	Metallurgy of ferrous metals (Physical and chemistry researches of metallurgical processes, Metallurgy International, Management and Audit for Metallurgy)
Metallurgy of fuel and reducers	Chemical technology of fuel and carbonic materials
Chemical technologies for ceramics and refractory materials	Chemical technology of refractory non-metal silicate materials ^{xx}
Safety of Labour	
General chemistry	
Faculty of Electrometallurgy	
Electrometallurgy	Metallurgy of ferrous metals (Electrometallurgy of steel and ferrous alloys) Special metallurgy
Foundry	Foundry of ferrous metals and non-ferrous metals (Foundry of ferrous metals and non-ferrous metals ^{xx} , Art and ornamental casting; Precision casting, Stomatological and orthopaedic casting)
Metallurgy of non-ferrous metals	Metallurgy of non-ferrous metals ^{xx}
Electrical equipment and electric drive.	Electromechanical system of automation and electric drive ^{x, xx}
Physics	
Faculty of Material Science and Metal Forming	
Metal forming technologies	Metal forming technologies (Technologies and software for metal forming ^{x, xx} , Marketing and commercial accompanying of metallurgical products)
Technological design	Metal forming technologies (Computer design) Metallurgy of non-ferrous metals (Computer design)
Engineering material science	Engineering material science Applied material science (Applied material science, Management and marketing of modern materials and technologies)
Heat treatment of metals	Heat treatment of metals (Heat treatment of metals ^{x, xx} , Computer modeling of metals)
Coating, composite materials and metal protection	Composite and powder materials, coating Metallurgy of ferrous metals (Protection of metals from corrosion attack)
Higher mathematics	

Faculty	
Department	Speciality
Quality, standardization and certification	Quality, standardization and certification
Faculty of Mechanics and Machine-Building	
Машин і агрегатів for metallurgy	Metallurgical equipment (operation and computer system monitoring metallurgical equipment ^{x, xx} , desing and development of metallurgical machines)
Technologies for machine-building	Technologies for machine-building ^{x, xx}
Wheel and crawler belt transport facilities	Wheel and crawler belt transport facilities
Engineering ecology and industrial labour safety	Ecology and environmental protection ^x
Theoretical mechanics	
Structural mechanics	
Applied mechanics	
Drawing and descriptive geometry.	
Faculty of Economics and Management	
Industrial economics	Economics of enterprises ^{xx}
Finance	Finance ^{xx}
Accounting and auditing	Accounting and auditing ^{x, xx}
Management	Management of organization ^{xx} Management of foreign economic activity ^x
Management of projects	Management of projects Administrative management
Political economy	
Faculty of Computer Systems, Power Engineering and Automation,	
Industrial heat-and-power engineering	Heat-and-power engineering ^{x, xx} Management of heat-and-power engineering
Heat technology and ecology of furnaces	Industrial heat technology (Heat technology, automation and ecology of high temperature units) ^x Heat physics
Computer technologies for economics	Economic cybernetics ^x
Informational systems and technologies	Informational control systems and technologies ^x Informational design technologies
Automation of technological processes	Automation management of technological processes ^{xx}
Applied mathematics and computer engineering	
Faculty of Humanities	
History, documentation and information activity	Documentation and information activity
Bases of creative and intellectual activity	Intellectual property
Foreign languages	Translation
Philosophy	
Sociology and political science	

Faculty	
Department	Speciality
Physical training and sports	
Pedagogics	Professional instruction ^{xx}

x – full-time and part-time (evening) instruction

xx - full-time and extramural instruction

Submitting procedure

1. Terms of Submission

Applications on admission are accepted by the Academy in the person of the Rector during the application period:

- preliminary faculty for foreign students from 1.09 until 15.10.
- full-time and part-time departments from 1.03 until 25 08.
- extra-mural department from 1.03 until 15.11.

2. Deadline for Submission

- preliminary faculty for foreign students– 15.11.
- full-time and part-time departments – 25 08.
- extra-mural department – 15.11.

Ultimate term of arrival in Ukraine:

- preliminary faculty for foreign students – 15.11.
- full-time and part-time departments – 25 08.
- extra-mural department – 15.11.

Registration: within 3 days after arrival in Ukraine.

Admission to the Academy is by examination and selection of the best results.

The applicants pass examinations in mathematics, the Ukrainian or Russian languages. The persons, who desire to study a particular academic discipline, pass entrance examinations in the corresponding basic disciplines.

Entrance examinations for applicants of full-time and part-time departments begin on 1.07 and last until 25 08; extra-mural department examination time lasts until 15.11. Admission to full-time and part-time departments takes place on 30. 08, to extra-mural department - by 15.11.

The persons who came to study a particular academic discipline have to submit and pass entrance examinations. Examination time for them is the week before the start of a corresponding semester.

Foreign student instruction is carried out at the preliminary faculty for foreign students as well as at full-time, part-time and extra-mural departments, in accordance with the contract concluded with the student. The contract determines the payment for instruction and is in full agreement with the current Ukrainian law, if any other agreements in force do not define this term of education.

The list of documents for submission:

- a) General application form.
- b) Copy of education certificate with transcript of evaluation marks (points) for passed subjects.
- c) AIDS absence certificate, if it is not prohibited by international agreements with Ukraine.
- d) Medical certificate indicating the state of health, confirmed by the official health care organization of the country concerned; the document should be submitted 2 months before the arrival at the country, not later:
- e) Insurance policy (if the foreign applicants are not from the countries concerned in agreement with Ukraine for free medical service).
- f) Copy of the birth certificate.
- g) 6 photographs with the size of 60x40 mm.
- h) A return ticket with open date of departure within the term of 1 year.
- i) The document identifying the place of work and registration in Ukraine (for part-time students).

Documents mentioned in items b, d, f, should be confirmed according to the law of the concerned county and bear legalization procedure in Ukraine, if this is not prohibited by the international agreements with Ukraine.

3. Preliminary Courses.

Instruction of Foreign Students is carried out at the Preliminary Faculty for the Foreign Students

Organization schedule:

- Application and interview – until 15/11.
- Admission – until 20/11.
- Beginning of instruction – not later than 20/11. at group formation.
- Duration of course - 30 weeks.

Foreign applicants who submit to the Preliminary Faculty must be interviewed on mathematics. The foreign students of the Preliminary Faculty obtain a graduation Certificate in accordance with the examinations results. The admission of foreign citizens to the first course is governed by the rules of the Academy.

4. Language requirements

Instruction is carried out in the Ukrainian, Russian and English languages (Metallurgy International speciality).

The Academy recognizes the language requirements achieved in other institutions. The level of language skills required for training at the academy must be confirmed by either a corresponding certificate or an interview process.

Basic knowledge of the Ukrainian language is not necessary. Foreign students study Ukrainian and Russian in the Preliminary Faculty. The results of language studies are evaluated and registered in the certificates.

5. Cost of instruction.

The cost of instruction for a bachelor degree in Automation and Integrated Computer Systems or Metallurgy is \$1500 and more.

General Practical Information.

A: Admission Procedure.

Arrival in Ukraine requires a visa. Obtained at the Ukrainian embassy in the country relevant to the student (if it is not prohibited by international agreements with Ukraine). The registration of foreigners is governed by the current Ukrainian law.

Foreigners who arrive in Ukraine for instruction at NMetAU should register at the International Relations Department of the Academy within 3 days after their arrival.

International Relations Department:

Room #337, Central Building (Tsentral'ny Korpus) of NMetAU

Tel. (380562) 47-44-61

(380562) 41-08-96

Required documents:

- Written application for visa prolonging;
- Passport for registration granting permission to stay in, travel through, and depart from Ukraine during a determined term;
- Immigration card;
- 5 photos with the size of $3_{\text{cm}} \times 4_{\text{cm}}$;
- Customs receipt and other expenses;
- Insurance policy.

After graduation, or in the case of pre-term completion instruction, foreign citizens must leave Ukraine within a one month period (according to Nacaz #335 (Decree) of Ministry of Science and Education of Ukraine from 24/09/1997)

B: How to Get the Academy

NMetAU is situated near the center of the city of Dnipropetrovsk.

From the Dnipropetrovsk-Golovny railway station, take the #1 tram (fee – 0,5 hryvna) to Mechnicova Hospital stop. Alternatively, the #101 or 123 mini-bus (fee – 1 –1,5 hryvnas) and to Gonchara st..

From the Dnipropetrovsk – Pivdenny railway station, take the #30 mini-bus (marshrutka) or taxi and to Nagorny rynok stop.

From the bus station, take the #11, or #14, or #15 tram to Dnipropetrovsk – Golovny railway station and follow the instruction listed above.

If you are in the airport, take minibus (marshrutka) # 109, or taxi and go to Nagorny rynok stop.

C: Expenses

- The cost of passport registration is approximately 50 hryvnas (\$10).
- A room in the student hostel is available if needed. The accommodation cost is \$10 and higher per month depending on the level of living conditions.
- Expense for food and entertainments is 750 hryvnas (\$150) per month.
- Insurance policy - from 500 hryvnas (\$100).
- The library, reading rooms, and sport faculty are free in the Academy.

D: Accommodation

Foreign students may live in one of the student hostels, which have rooms for two, three, or four students.

Address:

Hostels #1,#3,#4: Kuybusheva st., 1a.

Hostel#2: Gagarina Ave., 11.

Hostel#5: Gagarina Ave., 13.

There is a kitchen and laundry room on the level of the hostel. A student canteen works within each hostel area as well as each building of the Academy.

1. Health Care Centre

Medical services for foreign citizens are provided both in state and private health care centers. The corresponding expenses are at the cost of the patients.

NMetUA students may use the student polyclinic of the Academy.

Student polyclinic of NMetAU:

Gusenko st. 13, Dnipropetrovsk, 49005

Tel. (380562) 46-22-11

(380562) 46-22-35.

The academy has student sanatorium and sports camp “Druzhba” on the banks of the Samara river (Ukraine).

1. Students with special needs

There is a Regional Education Center for Disadvantaged Students. It is the place where people with hearloss and blindness master the specialities in Economic Cybernetics and Economics of Enterprises.

Headmistress - Grishina Ol'ga Mykolayivna

Tel. (380562) 46-34-06

(380562) 41-08-11

2. Insurance Policy

The foreign citizens must have an insurance policy when they cross the state border or submit for registration to an institute of higher education. It guarantees payment in cases of urgent hospitalization.

Foreign citizen insurance agency:

Ltd. Pro 100-Strahkuvannya (before Ltd. Ukrinmedstarkh)

Karl Marks Ave. 93, room 403, Dnipropetrovsk, 49093, Ukraine

Tel. (38056) 744-35-87

(38056) 370-37-33

F. Aids for Instruction

1. Library

The library book fund is multibranch. It consists of around 500,000 books in Ukrainian, Russian and other languages. This figure is made by 300,000 of teaching books, 200,000 of scientific literature books, 3,000- theses and abstracts of theses.

The library fund is composed of literature on metallurgy, mechanical engineering, chemical technologies, economy, information technologies, social sciences and fiction. Every year the library receives around 180 periodicals.

In the library there is available rare and valuable editions, among them are “Metallurgy of Pig Iron, Iron and Steel” by A. Lebedura (1899), “The Basis of Thermal Dynamics” by Brandt (1915), “Brief Notes on Metallurgy of Steel” by Stark (1915); “Metallurgy of Steel” by V. Grum-Gruzhmayl (1925) and others.

In 2004, the electronic catalogue of our library was created. It contains information about books, scientific publications of NMetAU, and other periodicals.

Catalogues of the library:

- main alphabet catalogue;
- alphabet reader's catalogue;
- subject catalogue;
- main reference card index;
- subject card index of articles (politics, law, education, culture, science, economics, country studies);

The library provides decent services of:

- scientific and technical departments;
- student's book department;
- fictional literature (belles-letters) department;
- student study hall;

- reading hall for periodicals and scientific literature.

Working hours: 8:15-16:45 (Kiev time)

8:15-18:30 (Kiev time) for scientific and technical dept.

Тел.: (380562) 41-02-44, Fax. (380562)47-44-61

E-mail: biblio_met_akad@rambler.ru

NMetAU library has its branch departments in Krivorizky Metallurgical and Nikopolsky faculties.

Material Base:

The material and technical base of the Academy corresponds to the required international standards. The total area of NMetAU buildings for instructions and experimental work reaches 71,000 square meters. The number of lecture auditoriums, rooms for practical classes and seminars, and laboratories is 110. There are 40 computer classes. The total number of computers which are used for educational purposes is about 900, a considerable amount are connected with the infra-net of the Academy and to the INTERNET.

Other Information for Practical Use

The subsidiaries of the PRIVAT BANK are located in the central building of NMetAU and hostel #1.

The subsidiaries of the banks AVAI, Reiffeisen bank, Forum, Va-bank and others are within easy reach of the Academy. Financial operations are carried out directly in the above mentioned subsidiaries or by means of automated bank-teller (cash machines).

Out of class activities and leisure

The students of the National Metallurgical Academy have many opportunities to apply their talents. They obtain theoretical knowledge and practical skills as well as refining and cultivating their person and enriching their spiritual inner world. NMetUA has elaborated the system of out-of-class activities which helps the students to make their leisure time more enjoyable.

The Student Government Committee (SGC), which works within NMetAU, is the effective form of attracting students into solving general problems of their Academy. SGC ensures performance of student rights and fulfillment of students' obligations. SGC also develops social, economic and creative programmes for students. The work of the committee fully agrees with the current Ukrainian law and is coordinated by the documents of the Ministry of education and science of Ukraine and NMetAU Statute (decree) "About Student Government", which make the committee independent from political parties and political tendencies. The work of the Academy, faculties, academic groups and hostels is carried out with the help of the Student Government Committee.

The Council of Students is the executive organ of SGC. It regulates the work of the student active groups and represents their interests at the Academy, local authorities and state establishments, organizes the cooperation between the students from other institutions of Ukraine and from abroad.

Performance, music and live theatre play an important role in student's life. Participation in these activities adds to the development of artistic taste, provides aesthetic education, and forms the spiritual world of young people.

The students of the academy may develop their artistic talents in modern theatre, music studio, jazz band, folk dance studio, and modern dance group "Kurazh". Also, there are teams of comics KVN "Plus 5" and KVN "Steel project". These creative groups and studios are known as the leaders of local and national competitions.

Traditional festivals “Student spring” and “I am a first-year student” are the boost for student’s creative activity. A symphonic orchestra “Seasons” gives a free performance within the Academy every month.

The students of NMetAU have plenty of opportunity for sports. The sport club of the Academy encourages the students to pursue a healthy lifestyle, improve physical abilities and develop morality and good will. All these help to succeed in sports as well as in their professional sphere.

As usual, the students of the Academy take part in regional and national sport competitions between the institutions of higher education. NMetAU proposes professional training in more than 30 kinds of sports. The sportsmen from the Academy often win the prominent places in athletics, badminton, kick-boxing, karate, arm-wrestling and kozak wrestling, etc.

NMetAU sports camp “Druzhba” is recognized to be one of the best sports camps among the Ukrainian institution of higher education.

III – Faculty of Computer Systems, Power Engineering and Automation

The materials about this Faculty are being completed and translated now. They will add them to this site as soon as it possible.

IV – A Glossary of Basic Terms

- **Modular Content** – a system of teaching elements within the discipline, which is completed with the help of corresponding teaching methods.
- **Modular** – official final stage in the programme for professional training (academic discipline-practice-attestation) which is carried out by means of student workload (lectures, practical classes, seminars, laboratory works, student preparation work and individual student work, manufactory practice, tests and other forms of evaluative activities, research works for a degree).
- **Evaluative Credit** – an officially recognized final stage of the student training (academic discipline. practice, research work) which must be evaluated and fixed in documents.
- **Curriculum** – the system of didactic, methodological and organizational techniques oriented towards student instruction.
- **Qualification** – degree or diploma approved by the Institution of higher education, which is the witness to the completion of training for higher education.
- **Organization of the Educational Procedure** – a system of methods which provides the distribution of workload among the chairs of the institute of higher education, selection of teachers, establishing of a timetable, consulting classes, current and final evaluative activities, and state attestation. Organization of the educational process is carried out by the Academy subdepartments (teachers' department, faculties, chairs and ect.)
- **Teaching Programme** – an official document of the institute of higher education, which provides the organization of the educational process. The teaching programme includes distribution of evaluative credits among the academic disciplines, schedule of educational process, teaching programmes by semester, forms of academic workload, forms of current and final evaluation activities, and state attestation.
- **Individual programme** – a document composed by a student with the assistance of a teacher-curator. The individual programme contains disciplines, in which the student chooses to train for a one-year period; the choice must be in

agreement with established, compulsory workloads for the relative period; the procedure takes place at the end of each academic year.

- **Teaching Programme of a Discipline** determines the place and significance of a discipline in the process of a specialist training, skills and knowledge which the student obtains from instruction. The teaching programme of a discipline contains the information about the discipline's workload (amount of academic hours within the credit), themes of study, forms of instruction, final evaluation, ect.

- **Academic course** –a stage of student training completed over a one-year period.

- **Academic year** lasts 12 months and starts, as usual, on 1/09. The academic year consists of days for instruction, evaluation activity, of days on practice, research work, state attestation, week-ends, holidays and vacations.

- **Academic semester** – a period of study with an evaluative activity at the final stage. The duration of the semester is determined by the teaching programme.

- **Academic day** – a part of student work time. An academic day lasts 9 hours or less.

- **Academic hour** – a minimal unit of measurement for study time. An academic hour lasts 45 minutes. Two academic hours make up one double-period. At NMetAU, a double-period lasts 80 minutes without a break.

- **Academic classes** – lectures, laboratory and practical classes, and seminars carried out according to the programme schedule.

- **Lecture** – the main form of instruction based on theoretical material.

- **Laboratory classes** – the form of instruction where students conduct experiments under guidance of a supervisor; investigate the practical side of the theoretical material, to obtain practical experience working with complex equipment, (calculating equipment and measuring equipment), to study methods and techniques of experimental research for a definite discipline.

- **Practical Classes** – form of instruction where a teacher organizes a detailed study of definite theoretical problems within a discipline and students obtain skills and practical experience through the individual performance of various tasks.

- **Seminar** – a form of instruction where a teacher organizes a discussion around certain themes in which students represent their reports that they have prepared.