

Faculty of
FORESTRY



Suceava, Romania



**UNIVERSITY "ȘTEFAN CEL MARE"
SUCEAVA, ROMANIA**

FACULTY OF FORESTRY



**SUCEAVA UNIVERSITY PRESS
2009**

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HISTORY

The University of Suceava was created in 1990 as a follower of the first high schools issued in the historical Moldavia, such as Putna Academy, the Theological Institute and the Academy of Cernăuți. The history of this institution started in 1963 when the three-year Pedagogical Institute was established. The present University was reshaped on the former Institute of Suceava by the Governmental Decision 225/07.03.1990.

The Faculty of Forestry appeared in 1990 to continue the forestry academic tradition initiated in the northern part of the country more than a century ago. Here, the high-level forestry school was created in Frătăuți (Suceava) in 1883.

The reorganization of the forestry educational system led to establishing the Institute for Silviculture, Harvesting, Timber Processing and Transportation in 1948 in Câmpulung Moldovenesc, Bucovina. In 1956 the entire high-level education in forestry was centralized in Brasov.



**Câmpulung Moldovenesc
1948**



**Suceava
2010**



HISTORY

1950



The changes in the political realm related to forestry after 1990, the forest resource endowment of Suceava county, the economic importance of timber industries in this region and the historical tradition in forestry education in Bucovina have been preconditions in supporting the initiative of re-establishing the former Faculty of Forestry, created in Câmpulung Moldovenesc half a century ago.

Official document of establishment

The Faculty of Forestry and the University of Suceava were created at the same time.

The governmental acts issued after the Governmental Decision 225/07.03.1990 have confirmed that the Faculty of Forestry is accredited for long term training of engineers in forestry.



2007

MISSION

The Faculty of Forestry provides 4-years BSc degree in “Forestry”, 3-years BSc degree in “Ecology and Environmental Protection”, 1.5-year MSc degree and also PhD programmes.

Undergraduate studies cover the field of Forestry in two types of educational programmes: full time learning (4 years) and long distance learning (4 years).

The students are trained to become forest engineers with complex qualifications in land measurement and remote sensing, forest ecosystem management (e.g. dendrology, ecology, silviculture, entomology, game management etc.), wood harvesting technologies, and primary timber processing, ecological restoration and watershed management, as well as in forest economy and legislation.

The two master programmes run by the faculty focus on “Biodiversity Conservation and Forest Certification” and on “Management of Wood Harvesting and Wood Processing Activities”. The emphasis of the first one is on forest conservation, while the latter is focused on providing appropriate management knowledge and skills necessary in forest harvesting and wood processing.

Master degree students were involved up to now in three Erasmus projects regarding the innovation in forest sector.





MISSION

Potential employers are the forest districts, public or private, research institutions, private companies of wood harvesting and processing, forest management planning companies, local public administrations, firms specialized in geomatics and so on.

The curriculum is updated whenever needed in order to be on line with the new trends in forestry and forest-based sector. The Faculty also provides opportunities for those interested in acquiring a PhD degree in forestry.

In 2009 a new BSc specialization started, focused on “Ecology and Environmental Protection” to train specialists ready to answer to the new challenges of national environmental-related policies.

Faculty of Forestry Suceava is committed to offering sound training program for forest engineers, keeping up the scientific and cultural values of traditional forestry in the vision of continuous search for improved knowledge.



BSc PROGRAMME - GENERAL ASPECTS

Forestry is a branch of the national economy which has been highly prioritized in the last decades due to its widespread connections with the environmental concerns such flood risk, climate changes and biodiversity conservation.

Furthermore, the socio-economic aspects of forestry have been raised in Romania by the long-term process of clarifying the forest ownership.

The process of forest restitution started in 1990 and hopefully it will come to an end by 2010. During these two decades the institutional and legal framework, as well as the technical forestry-related paradigms have known permanent and dramatic changes.

Facing the challenges of ongoing changes, our team tries to provide accurate and reliable information that the forestry sector needs or might need in the near future.



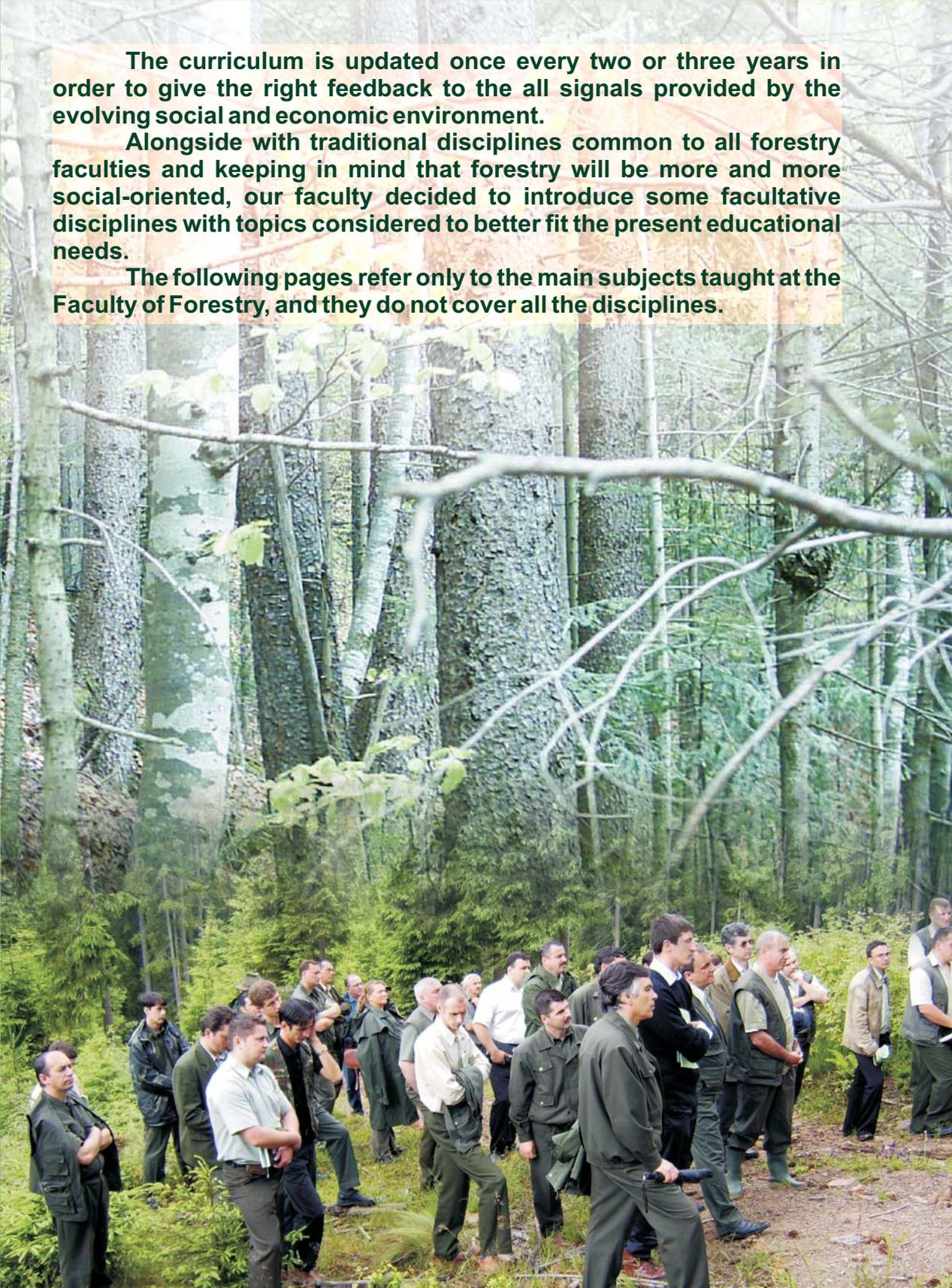


BSc PROGRAMME - GENERAL ASPECTS

The curriculum is updated once every two or three years in order to give the right feedback to the all signals provided by the evolving social and economic environment.

Alongside with traditional disciplines common to all forestry faculties and keeping in mind that forestry will be more and more social-oriented, our faculty decided to introduce some facultative disciplines with topics considered to better fit the present educational needs.

The following pages refer only to the main subjects taught at the Faculty of Forestry, and they do not cover all the disciplines.



BSc PROGRAMME - SILVICULTURE



“Botany” is one of the first courses taught at any faculty of forestry. This topic provides essential prerequisite information for other disciplines like “Ecology”, “Forest sites” and “Soil science”.

It is essential for students to be able to identify some soil characteristics and site attributes only by having a look at the vegetal layer. This course enables students to gain this skill.

In the second year of study, the discipline “Dendrology” introduces the main characteristics of tree and bush species that can be found in Romania, irrespective of their origin (natural or artificial). These characteristics are not confined to morphological features (bark, the top crown, branches, buds, leaves, flowers, fruits) and spreading area; other characteristics like soil and climate conditions, morphological and ecological variability are also taught.

The presentation is systematic (coniferous, deciduous trees), following the same pattern: rooting types, top crown shape, buds, macroscopic structure of the leaf and flowers, and fruit type. Besides that, some information concerning the productivity and fructification periods is also presented in order to ease the further learning process in other subjects like “Forestry”, “Ecology” and “Dendrometrics”.



BSc PROGRAMME - SILVICULTURE



“Topography”, “Remote Sensing”, “Geographic Information Systems” (GIS) and “Forest cadastre” are parent disciplines that could be considered a sort of backbone of forest engineering, closely related to land surveying and terrain mapping.

In the first year are taught basic principle of topographic measurements, mathematical support and up-to-date know-how, in order to familiarize the students with the whole technological chain of making terrestrial measurements and producing maps.

Students have the opportunity to work effectively with modern instruments like classical and laser theodolites, total stations, digital levels, global position systems. They are also trained to deal with measurement errors.

These skills and knowledge are helping the graduates to deal with the requirements of working with forest management planning, forest road designing and torrent control.

In the last year of study, students have the opportunity to learn more about GIS and remote sensing. Students are trained in the basic principles of dealing with common commercial and free GIS products. They have also the opportunity to get skilled in processing, analysing and rendering images into vector layers. Basic knowledge about forest cadastre is also taught in this course.





BSc PROGRAMME - SILVICULTURE



Information technology is taught in different manners; besides different software applications customized to different fields of expertise (forest road design, statistics and tree measurements), which are taught in other subjects, two distinctive subjects deal with information technology. One is “Computer-assisted drawing”, which is taught as facultative discipline in the first year of study, and the other one is “Information technology”, taught in the last year.

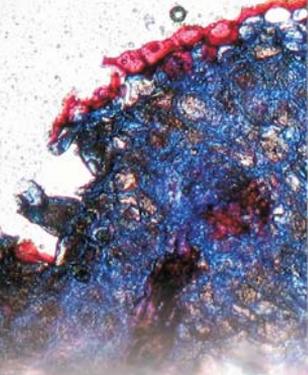
“Computer-assisted drawing” is actually focused on Auto-CAD platforms, and students are taught about working with different vector layers. The main topics addressed by the second course are quite common in any technical curriculum, and include: basic knowledge about databases (normalized databases, SQL main commands), about web design (HTML), and spreadsheets.

All these pieces of the wide information technology puzzle are further bound into small chapters of applied information technology downsized to the needs of a forest engineer. The main scope of these subjects is not teaching any programming language, but providing computer skills and minimal information a forest engineer needs whenever she or he has to find practical forestry solutions.





BSc PROGRAMME - SILVICULTURE



“Plant physiology” and “Phytopathology” are two related courses meant to familiarize the students with studying the tree plants as living organisms. Basic processes as photosynthesis, mineral nutrition, carbon uptake, respiration, transpiration and growth are studied and students have the opportunity to get into the biochemical riddle standing behind these processes.

The laboratory is well equipped in this respect and some practical works are welcome in training the students for the field experiments. The plant parasites are also studied, with the focus on fungal diseases and plant cancers. The most important species of fungi and parasites are presented along with their host and students are trained to recognize them in the field.

The main issues of this discipline include: the physiology of vegetal cells; water regime of plants; plants perspiration; mineral nutrition; carbon uptake; transformation and translocation of organic compounds; plants respiration; growth and differentiation of woody plants; pollution action of woody plants.



BSc PROGRAMME - SILVICULTURE

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“Forest soils” and “Forest sites” are closely interconnected and the tree canopy productivity and health depend to a large extent to soil and climatic conditions. All these interactions are studied in the second year of study when the students learn about the theoretical background of soil science and the multiple interactions between bedrock, soil and climate.

The main physical (bulk density, porosity, compactness, pore volume etc) and chemical properties (pH, mineral N, P, K, Ca contents, free hydrogen, exchangeable cations etc) of soils are studied along with their support capacity for different forest species. This physical and chemical constraints posed for different forest species are presented in detail, as well as the favourability factors worth being considered whenever a given composition of species will be contemplated.

Different soil samples, representative for the main forest regions are used for training purposes and a practical test, consisting of soil recognition, ends up the exam.

The main types of forest sites are studied in the second semester. The Romanian system of forest sites is extensively presented and students have the opportunity to familiarize with the main challenges of forest typology, having considered the wide variety of Romanian forest ecosystems.





BSc PROGRAMME - SILVICULTURE

“Statistics”, “Dendrometrics” and “Forest Inventories” are taught in the second and third years of study.

The first one deals with the basic principles of population sampling, main statistical indicators and statistical tests of conformity. Simple and multiple linear regressions are extensively studied in order to train the further graduates in producing statistical inferences and assessing the statistical significance of regression models. Main types of distributions are also studied and applied to trees distribution.

“Dendrometrics” is studied in the third year in order to train the students in assessing single tree volume, stand volume and whole forest volume. A great deal of statistics is being applied and the assessment methods officially recognized in Romania are thoroughly presented in this course.

The “Forest inventory” subject is taught as facultative and is meant to familiarize the students with large scale inventories techniques.

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BSc PROGRAMME - SILVICULTURE



“Afforestation” is another important course taught at our faculty. Pursuing the same nature-oriented principles of Romanian forestry, this course deals with all the theoretical and technical aspects of artificial regeneration of forests. It is structured into three sections following the logical flow of regeneration material: seeds, nurseries and afforestation technologies.

The seeds section refers to fruition, evaluation and prognosis of fruition, seeds quality control techniques, fruit and cone processing techniques.

As for the nurseries, the main issues the course deals with are site selection, nursery specific works, tools and mechanization.

The late section refers to types of afforestation works, tree species selection, ground and soil preparation, direct seeding and planting techniques, ecological restoration, and rehabilitation of badlands or less productive stands.

Students are familiarized with the technical standards used by the Romanian forest administration and this aspect is very important from a practical point of view; they also have to produce an afforestation project in order to pass the exam.





BSc PROGRAMME - SILVICULTURE

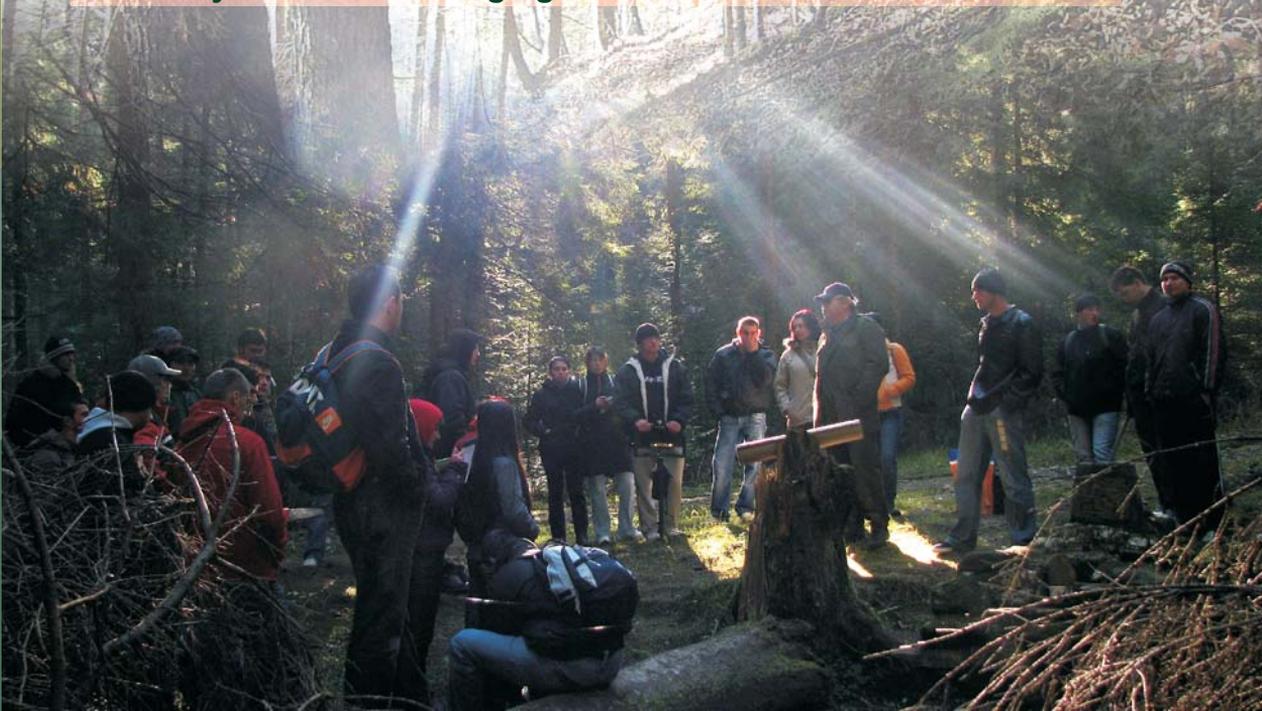


From a very practical point of view the course of “Silviculture” is the essence of forestry since most other subjects or disciplines are related to effective forestry.

The course is structured into two parts: “Silvo-biology” (1st semester) and “Silvicultural techniques” (2nd semester). The first part is being focused on identifying the ecosystem elements and highlighting the ecological factors and their impact upon the forests meant as ecosystems. The development stages passed by a forest are thoroughly examined as well as the ways of controlling the light and warmth that reach the forest litter through thinning the forest canopy.

The technical part of silviculture focus on theoretical background of tending works and silvicultural systems and on the practical aspects of tending works and regeneration cuttings.

The competencies thus gained refer to technical knowledge effectively needed for managing the forest stands.



BSc PROGRAMME - SILVICULTURE



The “Forest entomology” course presents different species of insects that produce diverse damages to forest trees, as well as the available technologies meant to control the insect populations.

Students are also aware of the environmental threats raised by chemical control of forest pest and environmental-friendly means of controlling these populations are extensively debated.

As for the “Forest monitoring”, the course provides information regarding the forest monitoring as a component of the integrated environment monitoring, the forest survey networks, the methodology for forest soil and vegetation survey, the multi-annual results regarding the forest health and soil state evolution, the effects of stress factors over the forest ecosystem, the evolution of the national forest resource in terms of structure and volume.

The applications of the forest monitoring activity for a sustainable development of forest ecosystems are also a topic of the courses.





BSc PROGRAMME - SILVICULTURE



“Forest transportation” and “Torrents control” are two basic courses, essential for understanding the man-made infrastructure of the forest economy. The forest transportation network provides appropriate conditions to capture the forest rent, while the torrent control facilities contribute to avoid potential negative externalities of flush floods.

Students are taught about designing the forest roads and additional constructions needed to protect them (bridges, ditches, supporting walls). The course has an application part, a project, designed by each student having a map with contours, different land uses and two points to be connected by the new road. In addition to all technical details, the student has to come up with some sort of feasibility study of two or three alternative routes.

The torrents control course covers two semesters and deals with all the theoretical and practical issues related to fluid dynamics, the complex transportation process triggered by heavy rainfall along the slopes more or less covered with forests and the technical means meant to smooth the flow-peaks and secure the sedimentation process behind the dams. The theoretical support goes together with a technical project where students have the opportunity to make all hydrological and technical calculations needed for a real project, including economic assessment.



BSc PROGRAMME - SILVICULTURE

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All the silvicultural systems prescribed by forest management involve harvesting and logging technologies. Therefore the course of “Forest harvesting” is equally important as other technical subjects, such as afforestation, silviculture, forest management planning, forest sites and dendrology.

The subject implies a consistent logical framework, as the harvesting operations imply complex equipment, hard working conditions and labor protection measures.

All-important equipments used in harvesting operations are presented along with organizational issues related to harvesting operations (time frame, labor consumption and labor-productivity calculations) in order to provide the knowledge and skills needed in harvesting operations.





BSc PROGRAMME - SILVICULTURE

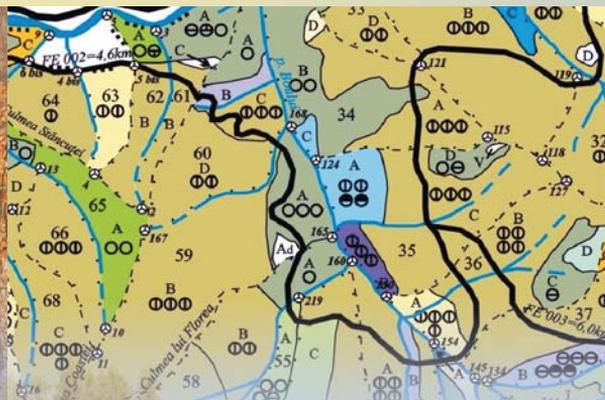


Traditionally hunting, game management and salmon fishery are found in any forest related curricula. Our faculty provides basic knowledge related to the game biology and ethology as well as to the environment conditions where the game lives. The morphology in different stages of individual development and all the aspects related to the behaviour of those species are presented step by step. The evaluation of the wild animal populations is one of the most important problems of quantifying the hunting potential in the field. The main theoretical methods of evaluating the sedentary game populations are thoroughly presented along with the principles and ethics of hunting.

The morphology of the main species of salmonides in Romania is also presented in the course as well as the new species brought into the spontaneous fauna. The ecosystem where they live in, the adaptation conditions, all aspects related to their behaviour, the intra- and inter- specific relations, the influences of the human activity are presented for each species. The course also underlines the ways in which salmons can be farmed in artificial conditions. Aspects related to organizing mountainous fishery and its economical implications are also included in this course.



BSc PROGRAMME - SILVICULTURE



“Forest management planning” is a part of the forestry core-subjects. It is equally technological planning and strategic development, providing some basic information for forest accounting. As a main technological development tool, forest management planning has undertaken the main core of knowledge from other related subjects in order to shape a thorough understanding of the structure and functions of the forest ecosystems. This discipline is operating with a specific set of mathematical models, known as management planning methods.

The lectures are organized in two parts, corresponding to the two semesters. The first part deals with the basic knowledge necessary for getting appropriate professional skills, one of them being the capacity to figure out the dynamics of forest structure in time, as well as the basic knowledge needed for effective management planning, which is the main topic for practical application carried out in the second semester. The lectures taught in the second semester are focused on the most important challenges the management planning has to cope with, namely the manner and the criteria needed to create protected areas, the process of harmonizing the Romanian criteria of zonal functioning with the criteria used for declaring forests with high conservation value.





BSc PROGRAMME - SILVICULTURE



“Landscape architecture” is an environmental design discipline taught in the last year of study. It deals with the various manners in which the human beings and society, as a whole, shape the environment.

Graduates are getting familiar with mapping, interpreting and creating different pieces of landscape, from the house backyard to a public garden or a park. They are also introduced into the design process, which involves a thorough understanding of the social and cultural context wherein the natural ecosystems are altered or the artificial ecosystems are created. Students are trained to reshape the landscape or to enhance its aesthetic and functional dimensions, ecological health, cultural significance, and social relevance.

“Law and legislation” are also taught during the last year in order to improve the graduates' capacity to deal with the legal framework of forestry and forest-related business.

This course goes for a thorough understanding and use of basic concepts coming from the policy science applied in the forestry sector. Its goal is to make students understand the policy making processes relevant for the forestry sector, along with a better understanding of the bargaining process between stakeholders, both at national and local level.



BSc PROGRAMME - SILVICULTURE

Wood is a complex biological material. For engineers it has a unique combination of properties, that make the difference from other materials, for economists it is a renewable natural resource, and for consumers it is a rough material having a strange characteristic: it makes the air breathable and, even more important, it can prevent the climate changes.

Learning the “Wood processing and wood industry” the students have the opportunity to know various characteristics of forest tree species, the appropriate use of different grades of wood as well as technological chains of producing plywood and different sorts of wood-made boards (particleboard, fibreboards and oriented strand board). Basically, this course focuses on what has been standardized so far in wood industry, starting with timber grades, ending with sawmills and other industrial facilities. This course facilitates a lot of connections between technological and economic aspects of forestry and wood-industry and contributes to a large extent to shaping the forest engineering.





BSc PROGRAMME - EEP

As an EU member state, Romania has to improve its environmental standards and this is probably the most important challenge for the years to come. Great discrepancies between Romanian environmental performance and EU standards are found everywhere, in biodiversity conservation, water quality, land planning, waste management, recycling industry, energy, forestry and agriculture as well. Besides that, the Natura 2000 network introduces a new paradigm of the relations between the local communities and their natural endowment, wherein sustainability will be rendered into effective actions and a reshaping of the rural development in the long run.

In all these domains there is great need for specialists in "ECOLOGY AND ENVIRONMENTAL PROTECTION" (EEP) and our team has been determined to create a new training programme in this direction.

The new paradigm of sustainable development also involves new stakeholders, such as environmental NGOs (national or transnational, like Green Peace and WWF), environmental agencies and auditing companies. Therefore the new graduate programme has been deemed to train the students in the large "buffer area" between natural resources engineering and ecology. The curriculum was oriented in two directions: interdisciplinarian subjects, on the one hand, and analytical subjects, on the other hand. The new graduate programme (EEP) covers three years and the target group of possible employers is made of environmental protection agencies, NGOs and other types of structures involved in managing the protected areas, including local administrations.

MSc PROGRAMME - MWHWPA

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Having pursued a more diversified curriculum adapted to a diversified labour demand, the Faculty of Forestry and the Faculty of Economics and Public Administration joined their efforts and came up with a master degree program on “Management of Wood Harvesting and Wood Processing Activities” (MWHWPA). It lasts for three semesters and it is addressed to all those who are interested in this type of business and graduated a Bachelor of Science degree program. It is meant to be a complementary training program aiming at extending the skills and knowledge needed in the business run by the harvesting and wood processing companies. The learning and research mission assumed through this MSc goes in line with the profile and the specialization of the Faculty of Forestry Suceava.

The students get experienced in:

- Applying updated technologies and improving the personnel skills;
 - Improving the managerial tools applied at the company level;
 - Organizing environmental-friendly production chains and harvesting methods;
 - Innovating technologies in harvesting and wood processing.
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MSc PROGRAMME - BCFC

The master degree programme on “Biodiversity Conservation and Forest Certification” (BCFC) has been deemed to meet the training needs that had been revealed when the National Forest Administration has decided to certify about one million hectares of forests. Not surprisingly, in the same period the national network of protected areas was being shaped and new professional profiles enriched forestry. The staff of the national and natural parks, most of them being directly subordinated to county branches of the National Forest Administration, have to cope with challenges brought by the new requirements: overlooking the harvesting process in the buffer areas, having a close dialogue with local communities, bringing communication and public relations in their daily activities or dealing with tourism in protected areas.

The master degree programme covers three semesters and consists of an array of one-semester courses meant to familiarize the students with some inter-disciplinary topics, such natural ecosystem dynamics, protected areas management and legislation, forest certification standards, landscape ecology, integrated pest control and biodiversity conservation. Some of these topics have been deemed as extensions of the core subjects taught at the graduation programme, in order to stimulate the student's capacity to think over the various connections between more or less forest-related fields of research.

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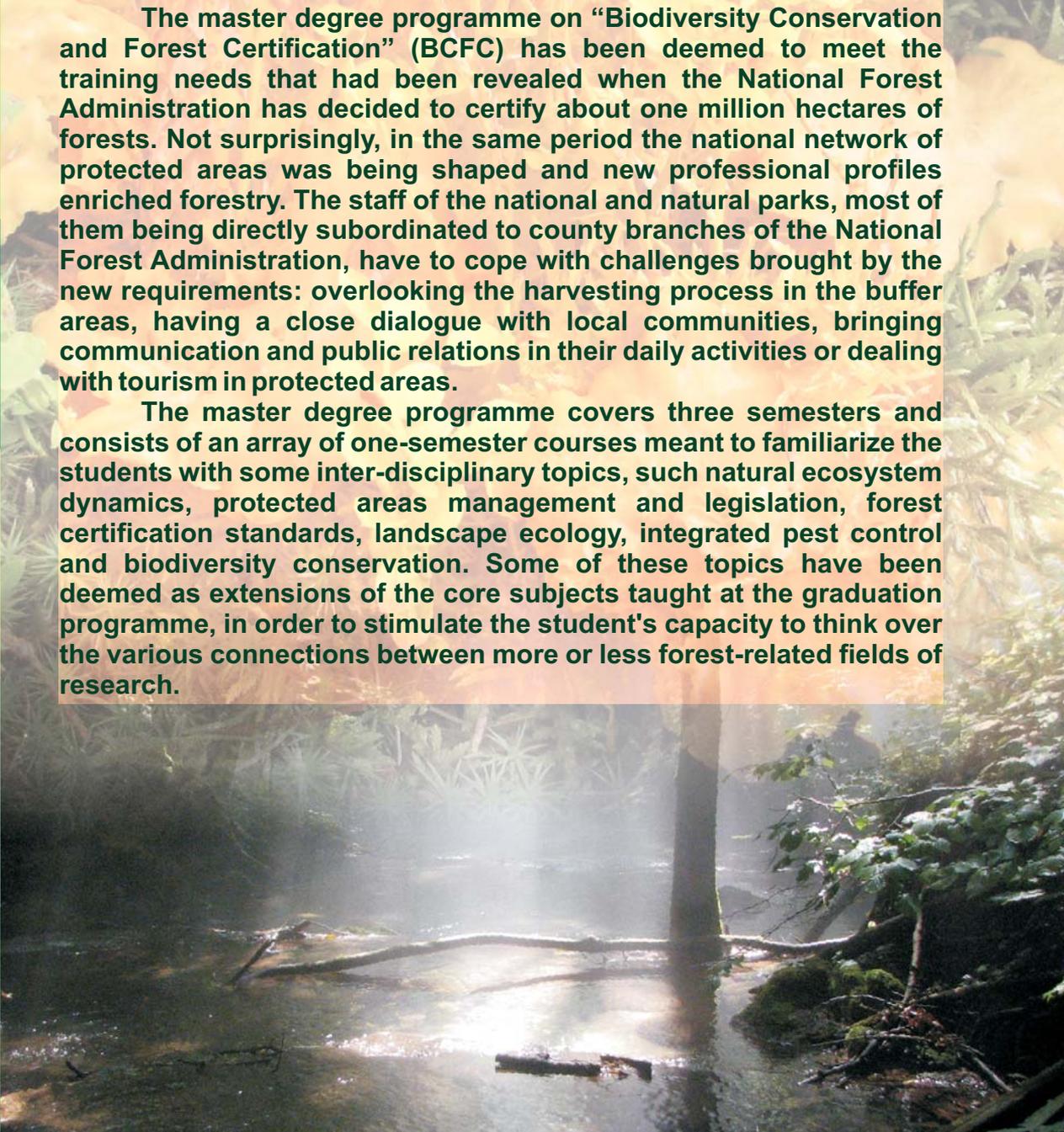
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RESEARCH

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Modern teaching shall be closely related to research, whenever it is possible. Forestry, like all the other activities in which people interact with biological populations, needs a great deal of skills and effective knowledge of what happens in the real nature. Therefore our training mission cannot be separated from our research mission, and our team is strongly committed to pursuing the vision of improved teaching activities through better research activities. Wherever possible, students are involved as well in research projects.





RESEARCH



Since the very beginning, by the mid-90s, our faculty has been involved in different small-scale research project, most of them run at county level. The thematic palette refers to pest control, feasibility studies for developing the forest road network, timber assessment and market studies and old-growth forest ecological studies. Another field of expertise was forest regeneration, both natural and artificial. In pest control and environmental-friendly forest protection technologies, our specialists have been involved in different research projects coordinated by themselves or by other specialists from the Forest Research and Management Institute.

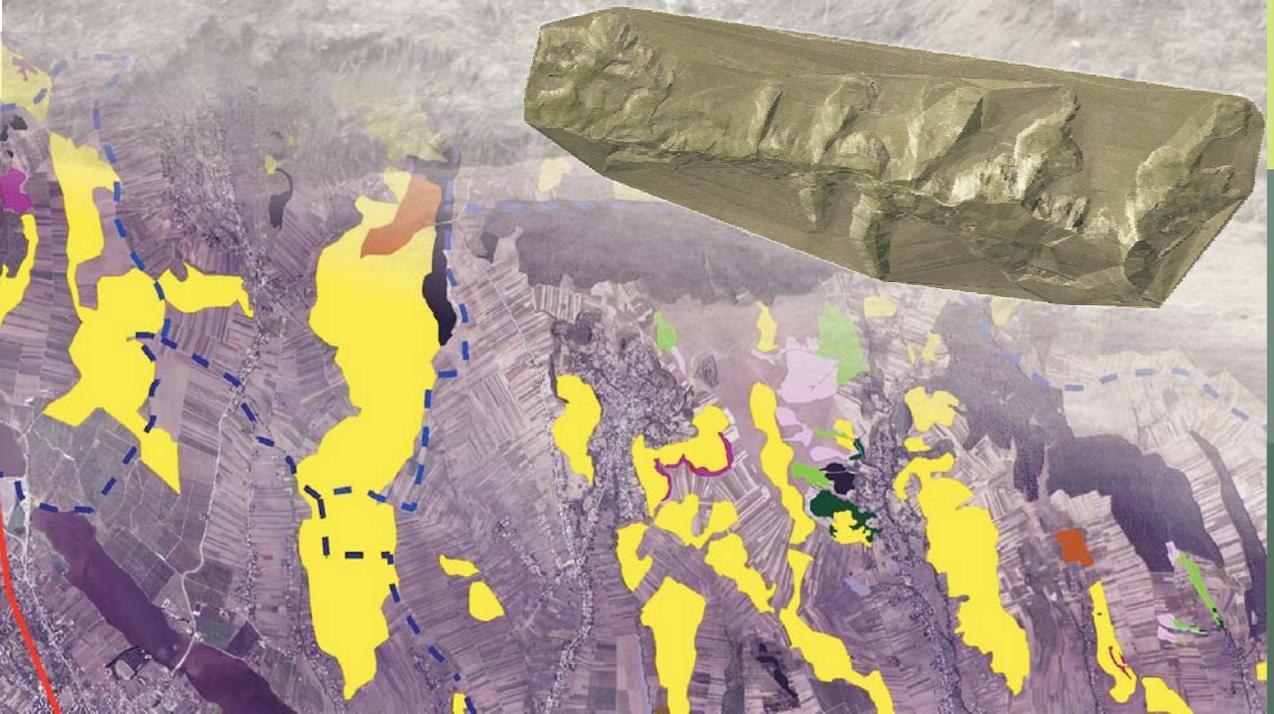


RESEARCH



The “Geomatics laboratory” is the backbone of all the projects carried out in the field of forest engineering. It helps both the professorial body, the students and the doctoral students to attain the necessary skills and experience in handling different types of information, like shape files, satellite images, geographical plans and data provided by total stations and GPS facilities. The laboratory is structured around an independent computer network of 15 stations. In addition to the existing software (Toposys, Erdas image, Mapsys, ArcGIS), students may use a lot of other worthwhile facilities like contour-meters, laser distomates, GPS gauges, A0 plotter and scanner, total stations and graphic stations.

Students are taught how to process the data collected through GPS and total stations, how to render them into vector layers and finally how to merge all these layers into geographical maps. A great deal of interest is given to image processing and interpretation in order to increase the forest engineers' capacity to collect updated information from satellite images and aero-photographs.





RESEARCH



A separate field of research is directed towards “Fundamentals of biological processes”. This topic is important not only for demonstrating the research techniques used in environmental protection and applied ecology, but also for having a minimal set of equipments and skills needed for further fundamental researches.

The utility of this laboratory is manifold, but for the time being the main researches are focused on biochemical and physiological mechanisms of seed germination, pest control by using components extracted from plants, and intra-specific variability of forest trees.

So far a couple of research reports have been handed over to the public authority responsible for scientific research, being focused on assessing the effectiveness of some commercial bio pesticides, physical methods for speeding up the seed germination.

The laboratory is endowed with some equipment, such as growth chamber, spectrophotometer, ultrasounds generators, and electrophoresis chambers.

Although this kind of researches carried out in forestry are confined to the seed germination or seedlings growing, the existing facilities are vital for developing other research projects in environmental protection and ecology.



RESEARCH



The “Dendrometrics laboratory” is equipped with reel measuring tapes, relascopes, vertex gauges, clinometers and calipers. These tools are mostly used by students who practice a lot of terrain surveys in the surrounding forests. Having used these gauges they are further able to inter-connect different types of information – collected in the field, or from the yield tables – and further assess the growing stock volume and/or its growth.

Tree-ring measurements are an important means of getting more information from trees. This information, finally expressed in cubic meters, can be further rendered into forest growth indicators, which are essential for a sustainable forest management. The most interesting field of expertise in which the doctoral students have been involved is the dendro-chronology, which seems to be a promising bridge between forest measurements and ecological researches, both aiming at more accurate prognoses over the climate changes.





RESEARCH



The Faculty of Forestry organizes national or international research events once every two years. In 2009 our faculty organized the international conference "Forest multifunctionality in the context of global changes" which gathered together scientists from ten countries. The conference was organized back-to-back with the COST Action E51 meeting, and with the meeting of the European Forest Institute Regional Office for Eastern Europe (EFI-CEE-RO).

Faculty of Forestry of Suceava organizes also regular events such book releases or workshops on research issues.

Each year a separate scientific session is organized for students, where they have the opportunity to present their own research works. In 2008 we were honoured to confer the title of Doctor Honoris Causa to Professor André Clément, from INRA, France. The same year, our faculty was co-organizer of the international conference held by the University of Cernauti, Ukraine, on "Bio-systems at the different organization levels used in the modern ecological monitoring today".



RESEARCH

The research mission of Faculty of Forestry from Suceava is to develop scientific research activities for a sustainable forest management and to consolidate the Faculty participation in national and international research networks. Research is perceived and implemented as a means for improving quality of educational programmes.

Research focus:

- study of the forest ecosystems under increasing human-enhanced perturbation and global changes threats;
- implementing modern technologies of mapping and describing forestland for an information-sound decision making;
- study of the decisional and institutional system of forestland management in Romania, and of the way to consider socio-economic factors in forest-related decisions.

Research is financed from governmental funds (National Council for Scientific Research in Higher Education), grants from Romanian Academy and via contracts with beneficiaries from private sector. The scientific activity of the Faculty is strengthened by participation in international and national research projects. Our major concern is the visibility of research results by publication in scientific journals and communication through forest practitioners.

In the latest four years, the Faculty of Forestry from Suceava considerably increased its participation in international research and mobility networks. The Faculty is involved in two COST Actions (COST Action E51 and COST Action FP 0703 Echoes) and participated as partner in a FP6 project (GoFOR) and a FP7 project (MOTIVE). Since April, 2009, our Faculty is member of the newly created Regional Office from Vienna of the European Forest Institute.





RESEARCH



Our faculty provides a special programme for getting the PhD degree in forestry. Since 1996, when the first doctor graduated our PhD programme, other 23 forest engineers have achieved the highest scientific degree and their subjects cover the following thematic issues: stands structure and stability models applied at stand level (2 theses), applied auxology to stands of trees located in different regions (8 theses), wood density and its relationships to stand structure (1 thesis), equilibrium on wood market at county level (1 thesis), economic and technological assessment of forest species (2 theses), the interaction between game species and the forest ecosystems (2 thesis) and economic analyses carried out on different aspects of forestry, including pest control (2 theses) and so forth. The topics covered by these theses are meant to contribute to a better understanding of the natural forest ecosystem from multiple points of view: ecological, economic and technological.

The doctorate school is organized as a separate structure at university level and is financed through a human resource development programme, which envelops all research fields available at the University of Suceava. According to the law, the duration of the ongoing doctoral programmes is three years.



OTHER RESOURCES



Our team is made up of 4 assistants, 13 lecturers, 10 associate professors and 4 professors. Most of them have got a doctoral degree in forestry and biology while the few others are preparing already in the process of polishing their theses. The average age of the personnel is less than 40 years.

Financial support via research projects helps the Faculty to significantly improve the technical resources. Modern instruments for land measurements (total station, GPS, automatic level etc.), professional weather centers and tree measurements instruments (Field Map Inventory System, Digital Calliper, Electronic Hypsometer etc.) are just a few examples presenting the modernization process involving the faculty. The laboratories hold all the needed didactic resources such herbariums, sampling of wood essences, insectariums, collections of rocks and minerals, hunting trophies etc. Several didactic experimental units are implemented in the field.

The hardware resources used by our staff can be summarized as follows: desktop computers, notebooks, multifunctional laser printers available through the faculty network, independent printers, plotters, servers, video-projectors and all the other equipments already mentioned (dendrometrics, geomatics, fundamental and biological processes).

All the premises, laboratories and lecture classrooms encompass about 1000 square meters and most of them are located in the new building of the University (E building).





OTHER RESOURCES



Our faculty is managing two hunting grounds (Mitoc and Râșca), encompassing nearly 20000 hectares in total. These facilities are used both for training activities – they are actually the field laboratories for the game management discipline – and effective game management, obeying the rules followed by all the hunting grounds in Romania.

The hunting ground Mitoc is located near the city of Suceava, in the communes Adâncata and Siminicea, in the Eastern part of the Suceava district. It is a hunting territory in the plain and it has a cinegetically productive area of 6155 ha, out of which approximately 30% is represented by forests, the rest being farming soil. The forest consists of hill traces, pure beech stands or spruce stands outside the area. The farming cultivable land consists of a rich range of farming plants: maize, potatoes, clover, alfalfa, corn, and sunflowers. The main species of game existing here are roe deer, wild boar, hare, fox, partridge, and quail.



OTHER RESOURCES



The hunting ground Râșca is somewhere in the mountainous area, on the area of two communes (Râșca and Bogdănești). It covers 13888 ha, of which about 90% is woodland (beech and mixed stands with coniferous and beech). It is populated with valuable game species, such as the stag, the wild boar, the red buck, the bear, the wolf, the lynx etc.

The two hunting grounds have feeders for wild boars, salt licks, three still hunt huts for watching the big deer and fields for the game food. There is also the chalet Șipotelu on the hunting ground Râșca, which is a modern building, offering proper accommodation for our students.

The game management activities are performed by the professional staff and by students. Thus the complementary food and salt supply, construction and maintenance of the hunting facilities, the field patrolling and checking are carried out by students, during their in-field practice. The prescribed game yield (for the roe buck, the wild boar, the stag, and the hare) is also made with the help of the students who get specific topics for their diploma projects.





OTHER RESOURCES

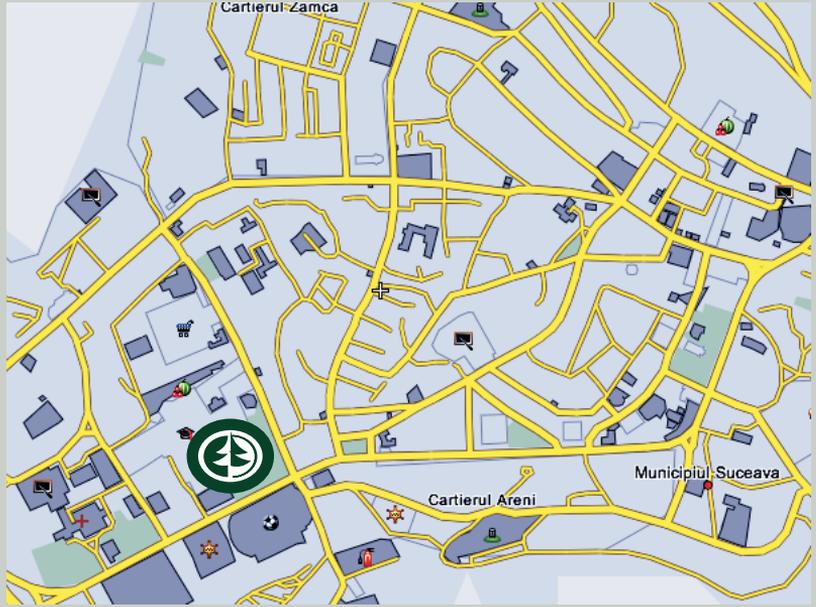
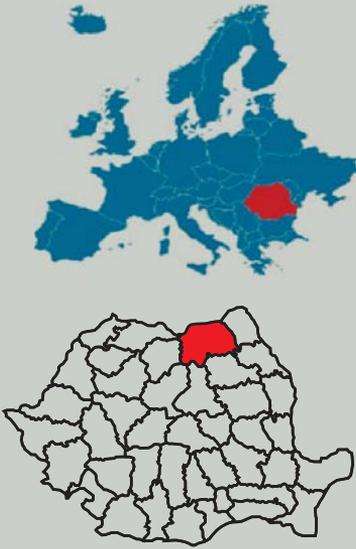
The University of Suceava is well endowed with different facilities and premises. Close to the University main campus a new student residence has been recently opened. The student residence turns into hostel during the summer holidays. Next to the student residence a modern multifunctional facility allows the students to play football or tennis, irrespective to weather conditions and a new swimming pool was recently opened.

The University restaurant allows 250 persons to have lunch and dinner in the central part of the campus. In the same campus other two renewed student residences offer comfortable accommodation.

The University library has about 275000 books and its virtual directory is supported by a 25-computer network. In addition to these resources, our faculty has its own library, where students may access various journals and books forestry-related.

LOCATION

ADDRESS **Universităţii, 13, 720229, Suceava, Romania**
Tel: + 40 230 216 147; + 40 230 522 978
Fax: + 40 230 521 664



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ACCESSIBILITY



By airplain

The University is located at 12 km from the Stefan cel Mare Airport – Suceava (<http://www.aeroportsuceava.ro>)

The airport can be used for direct trips, national or international, towards and from the following destinations:

- Vienna, Venice and Cluj Napoca (BlueAir Company);
- Bucharest (Taron Airlines);
- Timișoara (CarpatAir).

The airport can be reached from Suceava Centre by airline company busses or by taxi.



By train

(<http://www.infofer.ro>).

There are two main train stops in Suceava: Suceava (Burdujeni), Suceava Nord (Itceni).

Every 10 minutes a bus leaves Suceava train station for Stefan cel Mare University and every 20 minutes from Suceava Nord. There are also minibuses and taxi stations in the two train stations.



By car

The routes to Suceava are:

- *from the West* following E60 route (through Hungary – Bors Customs); E68 (through Hungary – Cenad Customs); E70 (through Serbia – Moravita, Jimbolia Customs); all these are connected to E58 and E85;
- *from the South* following E85 (through Bulgary – Giurgiu Customs) or E79 through Bucharest (through Bulgary – Vidin Customs) and E70 (through Serbia – Drobeta Turnu Severin Customs)
- *from the East* (through Moldavia – Albita Customs)
- *from the North* following E85 (through Ukraine – Siret Customs) or E58 (through Ukraine – Halmeu Customs)



