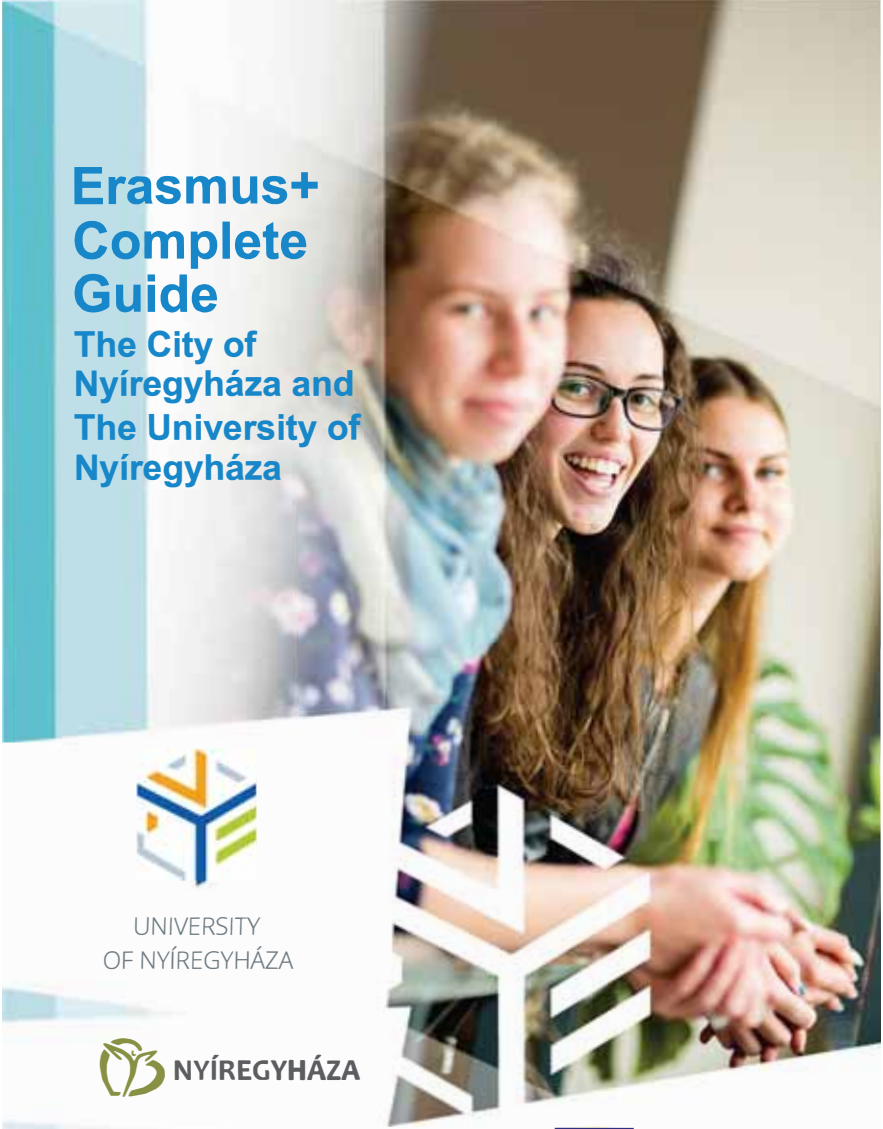
Erasmus+ Complete Guide

The City of Nyíregyháza and The University of Nyíregyháza



UNIVERSITY
OF NYÍREGYHÁZA

NYÍREGYHÁZA

Erasmus+


NYÍREGYHÁZA
Erasmus+

Erasmus+ Complete Guide

The City of Nyíregyháza and The University of Nyíregyháza

DEAR READERS, DEAR YOUNG PEOPLE,

As a Mayor, I am always pleased when young people from abroad arrive to study in our city. Participating in the Erasmus+ programme, they can not only return home with a more open-minded perspective and unique experiences but they can also take back the renown of our city and Hungary to their mother country.

Nyíregyháza is a youthful and dynamic city with several educational, cultural and sports institutions, well-kept public spaces, tremendous programmes. As a county seat, it is Hungary's 7th largest city with a population of 120,000, yet it is a calm, friendly and cozy settlement. If I wanted to convince the young that Nyíregyháza is 'a cool place', I could enumerate my reasons for a long while, but let me just give you a taste of it.

The standards of our educational institutions, secondary schools and universities are well-known; the high-quality vocational training and the more and more popular dual education system are alluring not only to students but to entrepreneurs and investors as well.
It is not mere chance that global companies such as LEGO, Electrolux or Michelin have their plants here.

Students studying in Nyíregyháza can choose from various cultural, entertainment and sports events. Whether you prefer plays at the theatre, going to the cinema, quality museum events or maybe festivals and city occasions, you have a wide range of choices. In the city centre well-tended parks, snug cafés, restaurants and pubs await the visitors.

If you have the chance to visit Nyíregyháza, in Sóstó, you must see the Aquarius Spa and Wellness Centre, the Park and the Lake Spas, you cannot miss the attractions of the Sóstó Zoo or the sights that conjure up images of the past in the Sóstó Museum Village.

Sports enthusiasts can live their passion at public sports facilities, on the city centre's tartan running track, in open-air work-out parks, in swimming pools, on an ice-skating rink, and, furthermore, on an extreme-sports circuit. The Sóstó Forest, Lake Sóstó and their surroundings are also appealing locations for excursions. For those who feel like wandering around on a bike, there are 60 kms of cycle track. Nyíregyháza is a good place for young people, it is a proper place to study and work; the people from Nyíregyháza have a lot to say about why they like living in this city.

Anyone who has ever visited and got to know Nyíregyháza thoroughly - as a tourist or as an exchange student - must have experienced all those things, as well as the open-mindedness and hospitality of the locals. I encourage everyone who has not visited Nyíregyháza to make up for it and visit us once in the future.

Until then, you can get informed about every current programme in Nyíregyháza on our website www.nyiregyhaza.hu, where you can click on 'About Nyíregyháza' on the menu and there you can read about our city in English as well.

Dr. Ferenc Kovács
Mayor

DEAR **STUDENTS,** DEAR **COLLEAGUES,**

Welcome to the University of Nyíregyháza! Thank you for choosing our university!
2017 marked the 30th anniversary of Erasmus – one of the most successful programmes of the European Union. Established in 1987 as a student exchange programme, it has since given 9 million people the chance to live and study abroad. Over the years, the programme has continuously grown bringing all the EU's schemes for education, training, youth and sports mobility under one banner.

In line with the internationalization objectives of the European Union, our goal at the University of Nyíregyháza was to design this catalogue, these programmes and every course for your success. This handbook has been compiled to help aid students and staff in planning their stay at our university.
Since internationalization is an important part of the academic training, we truly believe that international students and staff make significant contributions to the success story of the sending and host universities. Our definition of success means that we have helped you comprehend and retain knowledge that will support you in your career and your life. At the University of Nyíregyháza, we offer you the opportunity to learn the best practices that are currently being used in your chosen field or profession.
We sincerely look forward to welcoming you to the University of Nyíregyháza and we wish you a successful stay!

Erika Figula Vassné PhD
Rector

NYÍREGYHÁZA

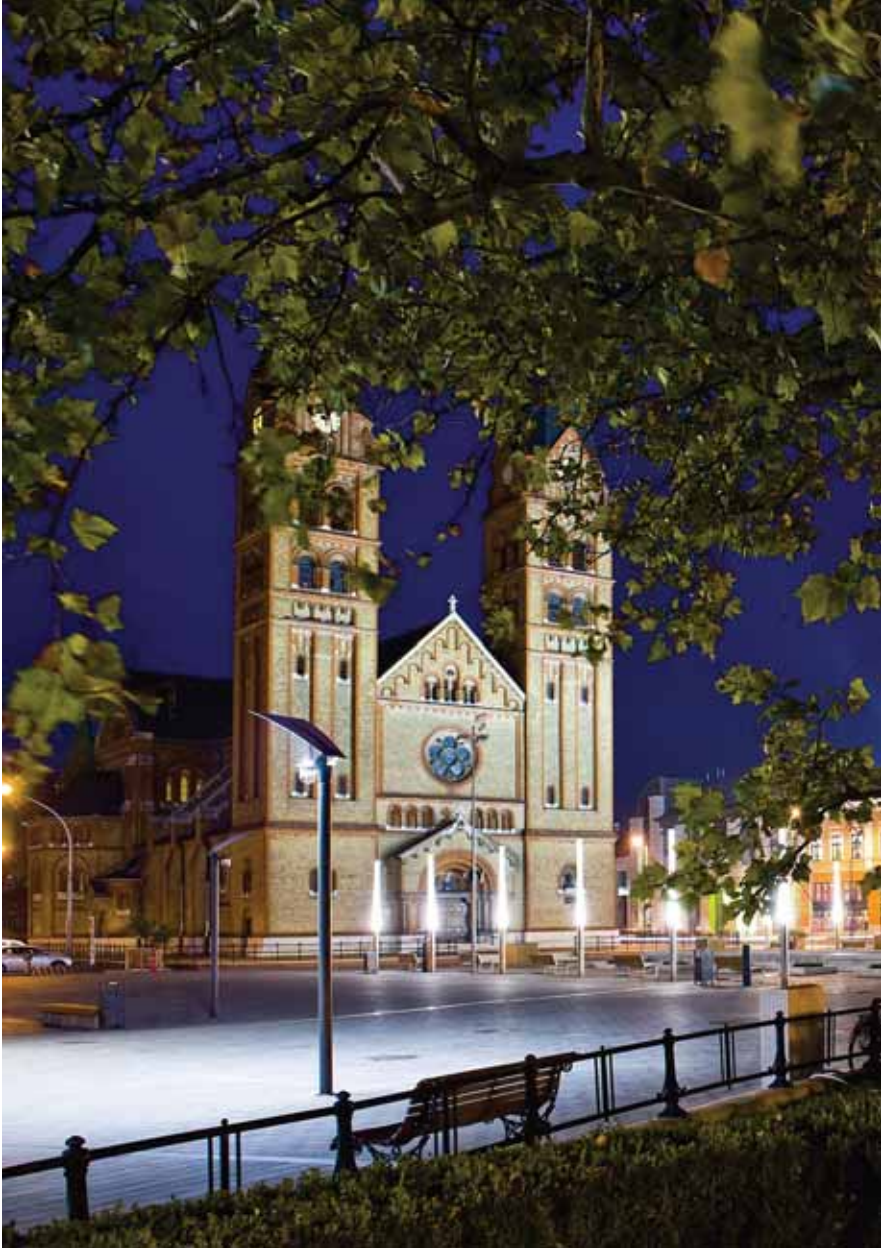
NYÍREGYHÁZA

By summing up the town's history in a nutshell it can be said, that according to archaeological finds, the area of the town has been inhabited since the 10th century. In spite of this, it is still considered as a relatively young settlement, as the real changes took place during the 18th century. Slovakian settlers (also called 'tirpáks') arrived in 1753 and lived on the so-called 'bush farms' around the town, establishing a peculiar settlement framework. The most important event in the lives of the Nyíregyháza citizens was redeeming their complete freedom from the landowner's rule in 1824. As a result, in 1837 Nyíregyháza was awarded a town status. Today an atmospheric and nice town with a bubbly life greets the visitors. Parks, squares, large green spaces, modern and old buildings shape the town's look, which managed to keep its old, intimate feel.

NYÍREGYHÁZA

We start our stroll in ***Kossuth tér***, the main square of the town. The most characteristic building of the square is the *Town Hall,* which was designed by Károly Benkó. The eclectic building, which has a renaissance atmosphere and pillared entrance, was built in 1872. The infamous 'Tiszeszlár Court Case' took place in the building's Ceremonial Hall, which has also been visited by Károly Eötvös and Kálmán Mikszáth. Zsigmond Móricz lived in the adjoining guest room for a while. Above the balcony facing the square, there are two Justitia statues on each end of the façade. The *Lajos Kossuth Memorial*, sculpted by Gyula Bethlen, is in the middle of the square. On the back of the statue a broken gun barrel can be seen, with a bird perched on it and the date 1848 inscribed underneath. The *Memorial Column to Complete Freedom from Landowner Rule* stands in the shade of old chestnut trees. On its left side there are hard, sceptical peasant faces, while on the right there are faces of hopeful peasants. "Nyíregyháza is no longer indebted to a landowner or under their rule."

The *decorative paving* of Kossuth tér symbolises the Solar System with its nine circular mosaics, capturing the planets. Further on from the square is the eclectic building of the *Takarékpalota (Savings Palace),* built in 1912 based on the design of József Hubert. Its listed cashiers' hall is covered with a stained-glass dome. Opposite is another eclectic building of the town from the end of the 19th century, the *Hotel Korona*, built in 1895, according to Ignác Alpár's plans. It has three street-facing sides, which all look different. An interesting fact is that electric lamps were turned on for the first time in Nyíregyháza on the night of the hotel's opening ball. Next to the hotel the *Roman Catholic Church* soars high, which was built by Virgil Nagy in 1902-1904. The church has a nave and two aisles, imitating cathedrals. Its most beautiful part is the monumental cross-nave. This is where the marble pulpit can be found, which is decorated with the relief figures of the four evangelists. Next door to the church is the Episcopal See of the Debrecen-Nyíregyháza Roman Catholic Diocese.



When looking towards *Bocskai utca,* one can see the empire-style building of the *County Court*, with the recently inaugurated *Public Prosecutors' Office,* next to it.

As we continue our stroll along Zrínyi Ilona utca, two nice buildings come into our view. One is the neo-baroque *Catholic Palace* and the other the former *Roman Catholic Rectory.* Between them, the decorative fountain called *Three Ladies*; a bronze statue of three bathing girls, by Tibor Borbás draws attention. Further down the street is a secessionist palace, which now serves as the town's *Registry Office*. Anyone who's been here will never forget the little street's atmosphere and colourful mixture. From Spring till Autumn the many flowers and shrubs ooze a Mediterranean atmosphere and passers-by can enjoy the street musicians' playing by the statue of the bronze girls.

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Nearby, ***Szabadság tér*** is the centre of the town's cultural life. The *Móricz Zsigmond County Library* can be found here, together with the interestingly shaped building of the *Váci Mihály Centre for Culture, Arts and Children* designed by *Ferenc Bán*. The blue building of the *Town Gallery* is just across the road from the above Culture Centre. The Gallery hosts the permanent exhibition of the 'Sóstó Medal Arts Creative Workshop', as well as temporary fine arts exhibitions. Next to the Gallery is the new building of the *Kodály Zoltán Primary School*. The school has a modern concert hall with good acoustics, where the world-famous 'Cantemus' choir practices and performs. The *Pál Gyula Hall* is also part of the school-building complex, where temporary exhibitions can be seen. The *Bujtos Leisure Centre* is just a short walk away. It's a venue for many high-ranking sports competitions. Fairs and exhibitions also fill the hall throughout the year. The area lying behind the Leisure Complex is called the ***Bujtos***, which used to be the place for fighting duels, as described by the writer Gyula Krúdy, in his works. However, nowadays, most of this swampy area has been drained and a leisure park was established.


otpbank

Back towards the town centre, opposite the *Savings Palace (Takarékpalota)*, is the statue of the *Town's Founders*, which was inaugurated in 2001. The statue, sculpted by Benedek Nagy, is of Count Ferenc Károlyi and János Petrikovics, a boot-maker from Szarvas, who both played important roles in re-settling the almost uninhabited town in 1753. At *Hősök tere* the imposing building of the *County Hall* can be found, built in eclectic style, also the work of Ignác Alpár. There are two niches in the building's façade, each containing a statue, works of art by Ede Kallós. One of them depicts Chief Szabolcs and the other King Stephen I. In the decorative courtyard the statues of two former prime ministers can be found, Count Menyhért Lónyay (1871-71) and Miklós Kállay (1942-44), natives of the county. The park in front of the County Hall is dominated by Zsigmond Kisfaludy Stróbl's 1928 *WWI Memorial*. Its main figure is the hero fighting a dragon, while the two side figures depict leaving for the battlefields at the end.

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The statue of the Dragon Killer, which can be seen on top of Gellért Hill in Budapest, is a copy of the Nyíregyháza statue, with slight variations. On the opposite side of the square is sculptor Sándor Györfi's *1956 Memorial,* which was erected in 2006.

In ***Október 23 tér*** is a chrome-steel statue depicting a female figure by Béla Tilles, called *Tree of Life*, symbolising the intertwining past and present, as well as hope for the future. There is another statue here, by Lajos Orr, a *bronze drinking fountain* depicting a cockerel.

The *Orthodox Synagogue* is in nearby *Síp utca*, which was built between 1924-32 based on Lipót Baumhorn's plans. Not far from here is the characteristic red-brick building of the *St. Atanáz Greek Catholic Theological College*, which moved into its new premises in 2003.

Towards the town centre is ***Bethlen Gábor utca***, with the twin-spired *Greek Catholic Church* on the corner. It was built in 1895 in a mixed Byzantine style. There is a little passage behind the church, where the fountain-statue of St. Michael, the church's patron saint can be found. The passage is named after him and the statue was sculpted in 1996 by Sándor Tóth.

The domineering building in ***Kálvin tér*** is the romantic *Reformed Church*, built between 1873 and 1882.

Országgázsló tér follows on from Kálvin tér, where a *Memorial* stands to the *Victims and Martyrs of WWII.* It was unveiled in 1991 by former Prime Minister József Antall. At the southern part of the square a bronze *horseman's statue* draws your attention, called *'The Hungarian Hussar'.* Hussars have been a part of the town's life since 1869, when a small cavalry regiment of the Hungarian Royal Army moved into the town's barracks. In 1891 larger barracks were built, able to accommodate a whole regiment. Until WWII Hussars played an important role in the town's economic and social life. The former *Nyírvíz Palota*, a secessionist corner building, which dominates the town's look, can be seen from the square. There are two mosaics depicting ancient occupations on the roof's façade: one depicts fishing and hunting, the other symbolises farming. The building now houses the *Kállay Gyűjtemény (Collection).* The collection includes the closely guarded correspondence of the former prime minister Miklós Kállay, the manuscripts of the writer Ferenc Ilosvay, the medal collection of Baron Gábor Apor and a 13-thousand volume library.

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The *bronze statue* of *György Bessenyei*, writer, philosopher and Queen Marie Therese's bodyguard can be found in *Bessenyei tér*. It was sculpted by Ede Kallós in neo-baroque style and it was the town's first statue in a public square. The eclectic building of the *Móricz Zsigmond Színház (Theatre)* is in idyllic surroundings. It was designed by Ignác Alpár and built in 1894. Its external façade is decorated with reliefs of Molière, Szigligeti and Shakespeare. Every year the theatre organises the HAPPY ART Festival (formerly known as VIDOR), which is one of country's largest all-encom-passing arts festivals. Opposite the theatre the statues of Mihály Váci (made by István Szabó in 1976) and Gyula Krúdy (made by Imre Varga in 2003) commemorate the town's famous natives.

Just across the road in *Benczúr tér*, is the monumental, neo-classicist building of the *Jósa András Múzeum (Museum)*. It was named after the famous scientist and polymath. The interior renovations of the museum were completely finished by Spring 2008 and it now hosts a rich selection of Nyíregyháza and the county's relics. The permanent exhibitions include archaeological, ethnographic and fine arts collections, as well as a vault room, with the golden treasures from Újfehértó. There are also valuable temporary exhibitions.

The limestone statue of *Gyula Benczúr*, a painter born in Nyíregyháza, can be seen just outside the museum. It was sculpted by Géza Fekete Galántai. Behind the statue, on the base of a fountain, in the shade of trees is the famous statue '*The Birth of Venus*' by Zsigmond Kisfaludy Stróbl. It is an interesting statue, as the original, which won a gold medal at the Barcelona EXPO in 1929, is now in Santa Barbara, California. This exact copy was presented to the town by the artist. The neat pavilion in the middle of the square has been recently renovated. It was built in 1925 and used to be a summer cake shop and café with music, then later a beer garden.

Walking towards Iskola utca, we get to *Luther tér* and the *Lutheran Church*. It's a listed building in baroque style. The Slovakians who were settled here in 1753 began to build their first stone church after the edict of tolerance was issued by Joseph II. It was designed by the Italian Giuseppe Aprilis and it was consecrated in 1786, on the highest point of the town. The church fulfils an important role in the music life of Nyíregyháza, as it hosts organ and choir concerts. A carillon on the façade of the building reminds people of the passing of time.

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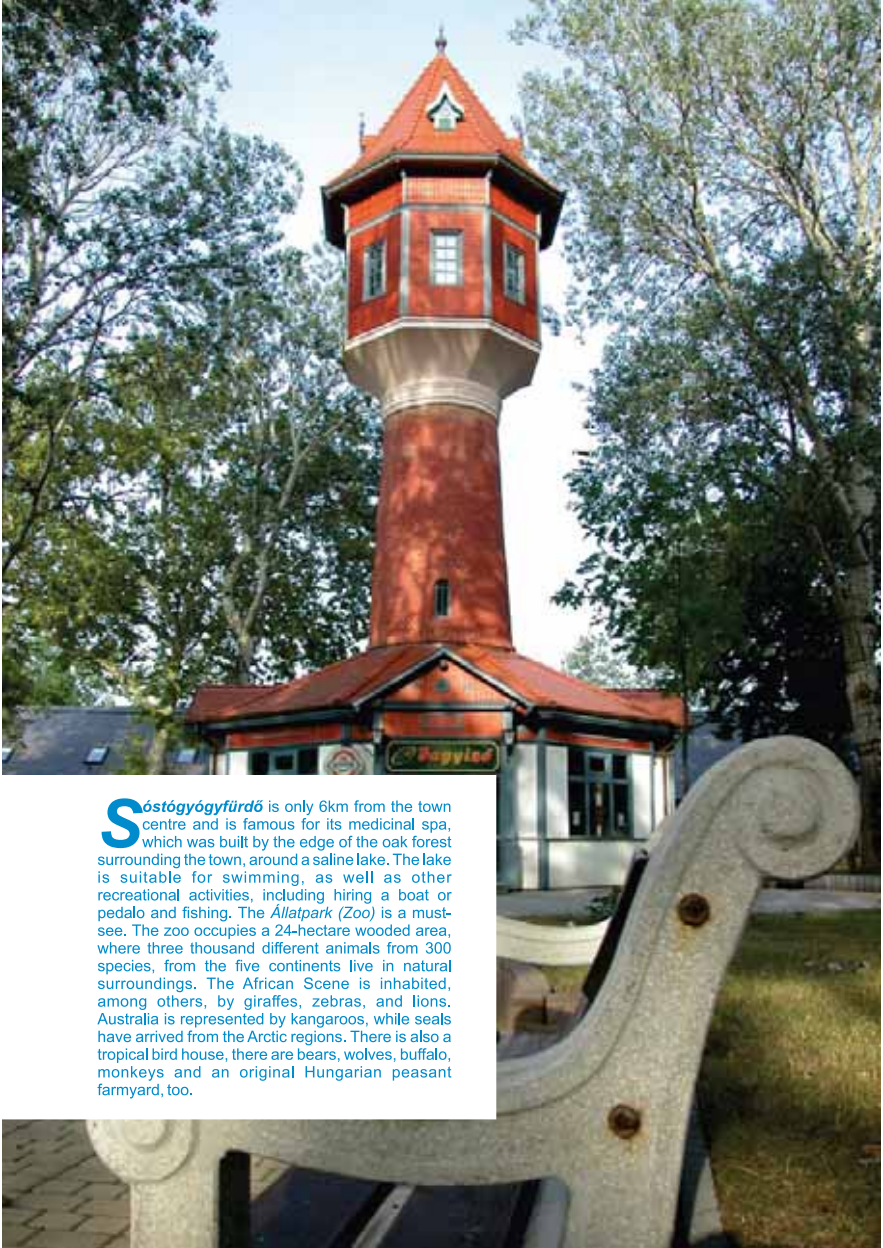
Next to the church is the so-called *Luther-ház (house)*, which consists of two buildings. They used to be rented for accommodation and offices by the Lutheran Church. The building was completed in 1928 based on the plans of architect István Kotsis and it was the town's most modern apartment building. Just a few steps away from the Luther-ház at 8 Szent István utca, there is a memorial plaque on the house's wall, indicating that this is where the famous writer and journalist *Gyula Krúdy's birth house* used to be, (born in 1878). The *Nyíregyháza Lutheran Kossuth Lajos Grammar School (26)* can also be found in this street, which was the first grammar school in the county. It was established by the Lutheran Church in 1806 and it became a grammar school in 1861. Among its students were Gyula Krúdy (writer), János Kabay (chemist-research scientist) and Béla Gádor (writer, journalist).

On the way to Sóstógyógyfürdő, the road goes past the University of Nyíregyháza. Next to it the *Tuzson János Botanikus Kert (Botanical Gardens)* were established to host special plants typical of the county. There is a rock garden, a lake, as well as collections of plants from tropical, subtropical, Mediterranean and desert regions.

Young and old all love the *erdei tornapálya (forest adventure trail)* in the Sóstó Woods, where, besides the playground, nature trails and bike paths await people wishing to relax.



Sóstógyógyfürdő is only 6km from the town centre and is famous for its medicinal spa, which was built by the edge of the oak forest surrounding the town, around a saline lake. The lake is suitable for swimming, as well as other recreational activities, including hiring a boat or pedalo and fishing. The *Állatpark (Zoo)* is a must-see. The zoo occupies a 24-hectare wooded area, where three thousand different animals from 300 species, from the five continents live in natural surroundings. The African Scene is inhabited, among others, by giraffes, zebras, and lions. Australia is represented by kangaroos, while seals have arrived from the Arctic regions. There is also a tropical bird house, there are bears, wolves, buffalo, monkeys and an original Hungarian peasant farmyard, too.

SÓSTÓGYÓGYFÜRDŐ

Further on from the zoo, visitors will reach a nicely carved Transylvanian gate. This is the centre of Sóstó. The *Krúdy Szálló (hotel)* used to be the centre of the spa's social life and the scene of huge parties. Krúdy himself, who professed to love Sóstó, spent a lot of time here. The building was renovated by Summer 2003 and re-opened as the *Krúdy Vigadó (Entertainment Hall)*. It now boasts a restaurant and a café. Also worth seeing is the *Víztorony (Water tower)*, which is a listed industrial building from 1911. In summer the Tourinform office is run from the water tower. Behind it is the *Svájci-lak (Swiss Cottage)* built in 1866, which got its name from the alpine style it was built in. Lujza Blaha, 'the nightingale of the nation' often used to be a guest here, as the memorial plaque states. Nowadays the cottage operates as a hotel again. Nearby is the early 19th century *Fürdőház (Bath House)*, which await visitors every day of the week with thermal pools, medicinal massages, Jacuzzi and sauna. Upstairs there is accommodation for visitors. Sóstógyógyfürdő's latest attraction is the *Aquarius Élményfürdő (Adventure Pool Complex)*, which was opened in Autumn 2005. It is open throughout the year, offering a refreshing experience to the whole family with the adventure, thermal and children's pools, as well as saunas.

NYÍREGYHÁZA

Turning off Sóstói út to the left leads to the *Múzeumfalu (Open-air Museum Village)*, which was opened in 1979. The museum exhibits and preserves the colourful folk architecture of the Northern Trans-Tisza region. A shopkeeper works in the grocery store from the beginning of the 20th century, drinks are served in the old pub and there is a shoe-maker and a hatter in the small craft shop. In summer there are many different programmes for the visitors: concerts, old folk festivities and tasting of regional dishes. Further along the main road, at the end of the bus route is the Parkfürdő (Park Swimming Pool Complex). Pools with warm and cold water, slides, sports opportunities and a racing pool tempt those, who wish to cool down. The iodine-bromide pool and water is excellent for locomotor diseases, joints pains, gynaecological illnesses, but can also be drunk therapeutically. Those who prefer natural water can have a swim in the nearby Tófürdő (Lake Lido).

Visitors tired from sightseeing in the town or refreshed from their swim have a wide choice of accommodation in Sóstó, as all categories from camping to hotels can be found here.

MAP OF THE CAMPUS

01 BUILDING 'C'
02 SWIMMING POOL
03 HOTEL SANDRA
04 BUILDING 'E'
05 STUDENT HOSTEL
06 FOUNTAIN
07 BUILDING 'B'
08 BUILDING 'D'
09 BUILDING 'A'
10 INTERNATIONAL RELATIONS GROUP
11 POST OFFICE
12 BOTANICAL GARDEN
13 SPORT CENTER

Contact us!

Address:

University of Nyíregyháza
Student Service Center
International Relations Group
H-4400 Sóstói út 31/B
Nyíregyháza, Hungary
Website: www.nye.hu/international
Email: international.center@nye.hu
Phone: +36 42 599-495
Fax: +36 42 402-485

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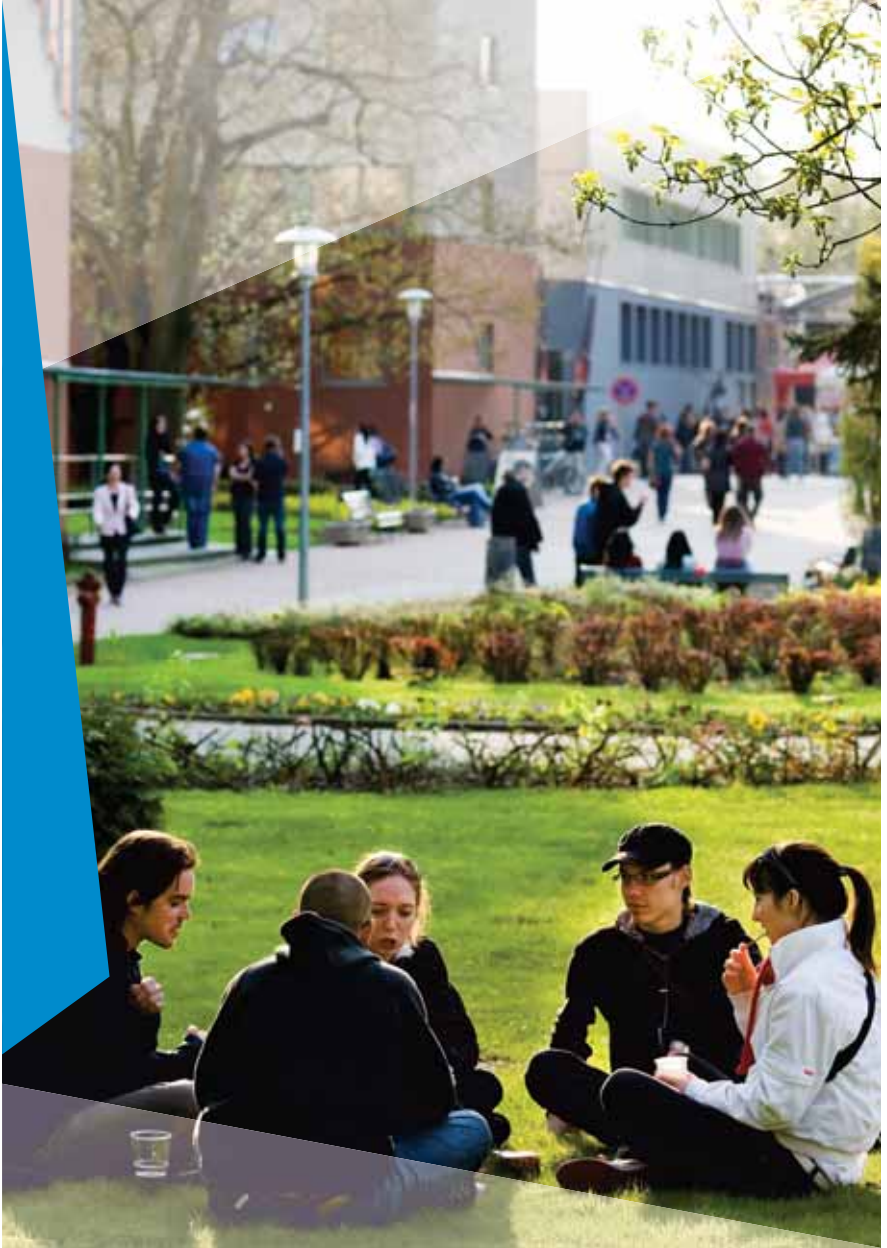


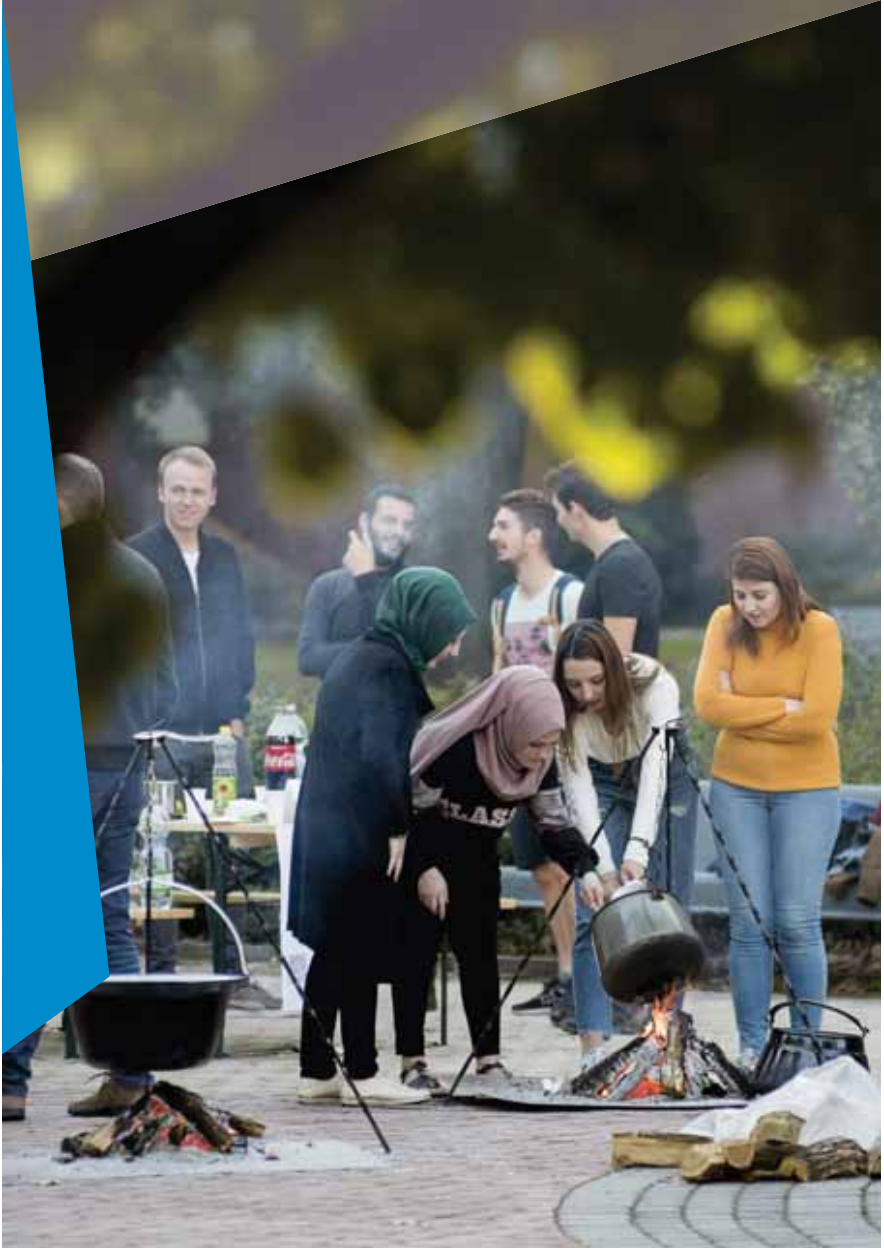
About the Erasmus+ KA 103 programme Learning Mobility of Individuals

The new Erasmus+ programme aims at supporting actions in the fields of education, training, youth and sport for the period 2014-2020. The programme gives students, trainees, staff and volunteers the opportunity to spend a period abroad to improve their skills and enhance employability. It supports organizations in working in transnational partnership and sharing innovative practices. With its strong international dimension (i.e. cooperation with partner countries), the Erasmus+ programme supports institutional cooperation and the mobility of young people and staff worldwide.

About the University of Nyíregyháza

The predecessors of the University of Nyíregyháza were institutions of higher education with national and international prestige, looking back on forty years of professional traditions and experience. As of the 1st of January, 2016, the institution has become a university of applied sciences, with the intention of preserving the values accumulated by the predecessors and implementing a strategy that is able to meet the ever-changing demands of the 21st century.

The University of Nyíregyháza has a specific education and research profile with the mission of providing academic research and knowledge transfer. Moreover, the university's practical educational fields – bachelor's programmes, bachelor dual training programmes, and master's programmes, practice-oriented R&D platforms – meet the need of the current economic and social demands.



About the University of Nyíregyháza

The aim of the University of Nyíregyháza is to act as the catalyst of the area, fulfilling its educational role with the cooperation of the national and international higher education institutes. The University of Nyíregyháza offers a wide range of educational programmes. Based on the number of students, the most popular programmes are teacher-training, engineering, agricultural sciences, economics, sports, natural sciences and informatics. The liberal arts, social sciences and art mediation are proportionally present in the education. Furthermore, the research results and potentials of the university are frequently presented to the public as well, in the form of Open University Lectures and Researchers' Night Lectures.

In the past ten years, infrastructural development projects have given the university the necessary facilities, infrastructure and state-of-the-art technology and equipment. Today, the campus is a real town within the town – winning the FIABCI Prix d' Excellence award in public sector category in 2009 – a pleasant complex of modern buildings located in a picturesque park where students and teachers use the most advanced technical equipment and educational facilities available. In line with the needs of internationalization, the International Relations Group oversees the international collaborations of the University of Nyíregyháza, promotes the mobility opportunities for students, academic and administrative staff and researchers, and supports the initiatives to submit international projects under Erasmus+ and CEEPUS rogrammes as well as other projects.

The institution is now a lot more than a university, it is the professional, cultural and art centre of Szabolcs-Szatmár-Bereg County.

More information: www.nye.hu/international

About our environment

Situated 280 kilometres from Budapest, Nyíregyháza is Hungary's seventh largest city; its spectacular and dynamic development has been continuous since the 18th century. The city is the centre of Szabolcs-Szatmár-Bereg County and the engine of the economic and cultural development of the region. With a population of more than 118.000, it is the home of a wide range of cultural, sports and educational facilities, including a museum village and a zoo.

More information: http://www.nyiregyhaza.hu/

Student Service Center
International Relations Group

The Student Service Center – International Relations Group is in charge of the international collaborations of the University of Nyíregyháza, promotes the mobility opportunities for students, academic and administrative staff and researchers, and supports the initiatives to submit international projects under Erasmus+ and CEEPUS programmes. The course catalogue for incoming Erasmus+ students can be found here: http://www.nye.hu/international

Address:

University of Nyíregyháza
Student Service Center – International Relations Group
H-4400 Sóstói út 31/B
Nyíregyháza, Hungary

Tel.: +36 42 599-495
Fax: +36 42 402-485

Website: http://www.nye.hu/international
Email enquiries: international.center@nye.hu

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Practical Information

Useful Links:

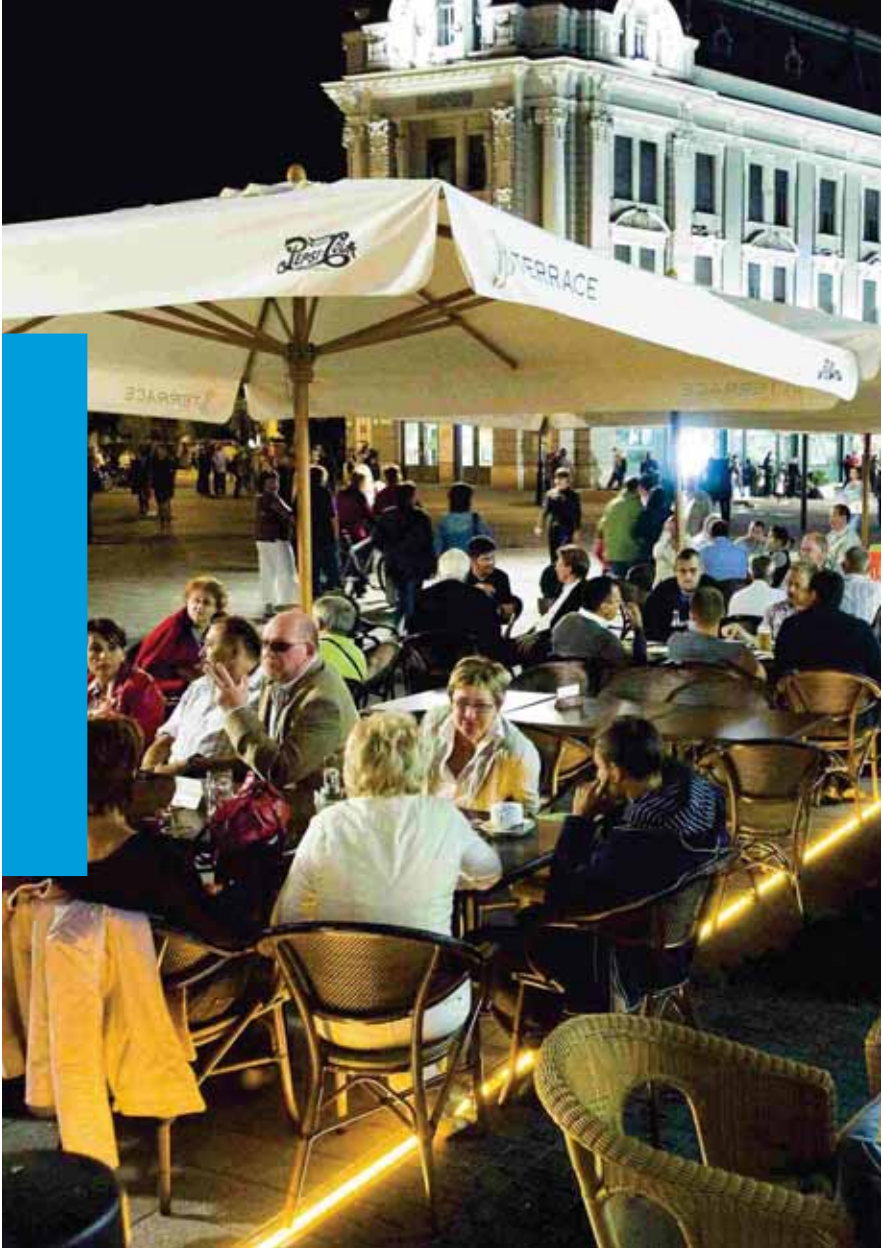
http://www.nye.hu
http://www.nyiregyhaza.hu
http://www.studyinhungary.hu
http://gotohungary.com/about-hungary
http://www.nyiregyhaza.info.hu/en/index.html

Academic Calendar:

http://www.nye.hu/international/academic-calendar

Accommodation:

http://www.nye.hu/koli
http://hotelsandra.hu/en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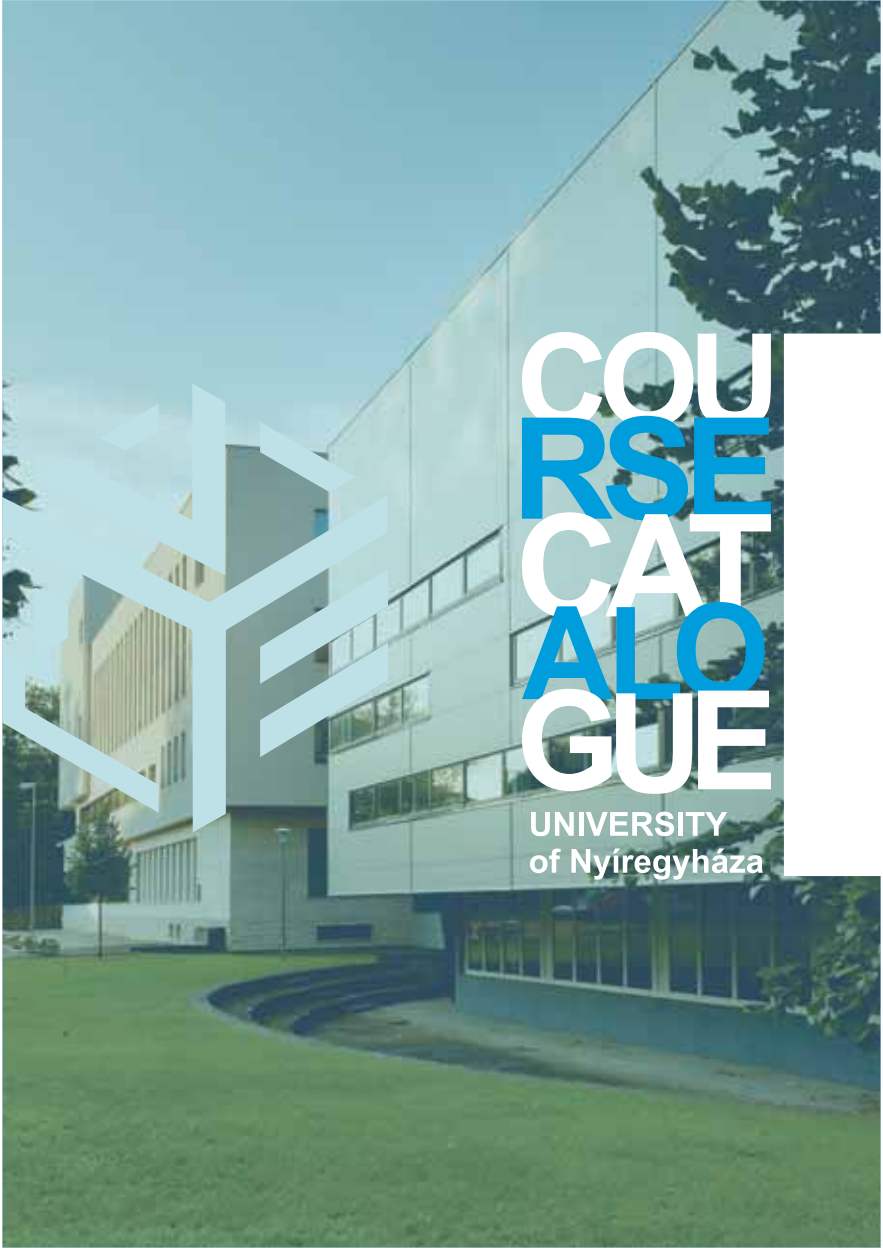

COURSE CATALOGUE

UNIVERSITY
of Nyíregyháza

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Erasmus+

AGRICULTURAL ENGINEERING

The higher education in the field of agricultural sciences has more than 50 years of tradition in Nyíregyháza, Hungary. Agriculture plays an important role in the Hungarian economy since it is unique in the world that more than 50 percent of the country's territory is suitable for agricultural cultivation. The main aims of the Agricultural Engineer BSc study at the University of Nyíregyháza are as follows:

- to train agricultural engineers who possess agricultural, technical and economic knowledge based on knowledge of natural sciences,
- to train agricultural engineers who possess knowledge of the European Union,
- to train agricultural engineers who possess the appropriate level of practical knowledge to directly manage agricultural production,
- to train agricultural engineers who are able to modify the technological processes used in a particular agricultural sector, as well as to introduce new technologies,
- to train agricultural engineers who can recognize their role in the food chain security.

Agricultural engineers seek and favour those solutions in their work that support the health of society and individuals as well as the protection of the environment. They are ready to pursue their studies in Master's Degree (MSc).

Programme: Agricultural Engineering BSc (Spring)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
1.	Agricultural Engineering	BMM1204	3	Spring
2.	Animal Husbandry I.	BMM2215	5	Spring
3.	Horticulture I.	BMM2216	5	Spring
4.	Plant Cultivation I.	BMM2217	5	Spring
5.	Environmental Management	BMM2211	3	Spring
6.	Precision Agriculture	BAI0139	4	Spring

Programme: Agricultural Engineering BSc (Spring)		
No.	Course name	Course description
1.	Agricultural Engineering	Course objectives: The overall objective is to provide the students with sufficient knowledge to master the possibilities of mechanization of agricultural production, in line with technology versions. The specific objective is to learn about cultivation and horticulture machinery and equipment, furthermore, to orientate about the principles of operation, structural design, particularly with regard to machine operation, work quality and economic characteristics. Subject programme: Machines of soil cultivation. Methods and machines of nutrition supply. Sowing and transplanting machines. Equipment and machines of irrigation. Construction of spraying machines. Equipment for plant protection. Running of sprayers. Harvest machines of forage plants. Harvesting of cereals (mechanization). Harvest technologies and machines of corn and sunflower. Machine harvesting of sugar beet and potato. Harvesting of peas. Methods and machines of tobacco harvesting. Mechanical harvesting of vegetables and fruits.
2.	Animal Husbandry I.	Course objectives: Acquiring theoretical and practical knowledge of general animal husbandry, of swine breeding and keeping and horse breeding and keeping, as well as small- and large-scale farming techniques. Students acquire knowledge about the physiological and environmental background, and the most important swine and horse diseases. Students obtain the most important swine and horse housing technologies, the mechanical and technical equipment of the housing systems. Subject programme: The concept of animal breeding and keeping, its national and international importance, history. Effect of domestication on the appearance and performance of animals. Principles and methods of propagation. External and internal factors affecting the animal performance. Genetics of animal breeding, population genetics. The role of appearance in the judgement of the individual values and the reproductive capacity. Registration, individual marking and breeding value estimation. Performance tests. Knowledge of selection and factors influencing it. Breeding, breeding procedures and breeding organisation. Biotechnical and biotechnological studies. The most important viral, bacterial, feeding and physiological swine and horse diseases. Importance of the swine breeding. Swine breeding values. Swine registration, the outline of criticism, performance tests. Swine breeding. Feeding by different weight and ages. Technologies of boar, sow, gilt, piglet and fatteners. Importance of the horse breeding. Horse evaluation, horse

		varieties. Horse breeding technologies, propagation process, delivery. Foal training. Methods of horse usage. Horse keeping technologies. Horse keeping technology features.
3.	Horticulture I.	Course objectives: The history, international situation, biological bases and the basic concepts of cultivation knowledge of vegetables, fruits and vines to learn. Subject programme: History of vegetable growing. The systematization, origin and grouping of vegetable plants. Propagating and growing houses. Propagation of vegetables. Crop rotation, nutrition, care of plants and irrigation. Harvesting, preparing for sale and storage of vegetables. History of pomology. Fruit growing regions in Hungary. The taxonomy and practical grouping of fruits. The morphology and physiology of fruits. The propagation methods of fruits. The ecological and economic demands of the plantation. Planting, pruning and maintenance of plantation. Fertilization. Harvest and post-harvest technologies in orchards. Viticulture: the history and present state of wine-growing. Taxonomy and morphology of grapevine. The ecological claims of grapevine. Ampelography of vine. The biological circle and vegetation phases of the vine.
4.	Plant Cultivation I	Course objectives: To familiarize students with the general foundations of soil and plant cultivation, to enable students to recognize the interactions between biology, ecology and agrotechnology, including a detailed understanding of the complex spawning technology of grain crop. Subject programme: The role, importance and features of crop production in Hungary. Natural resources, biological foundations, principles of cultivation technology of arable crops. The detailed elements of the cultivation technology of arable crops: crop rotation, soil preparation, fertilization, planting, plant care, plant protection, irrigation, harvesting, seed production. Cultivation of winter wheat, autumn and spring barley, rye, triticale, oats, rice, and maize.

5.	Environmental Management	Course objectives: The students know the fundamentals of environmental management in agriculture; know the environmental spheres pollution causing processes, and opportunities for remedies of environmental harms. Students know the impacts of agricultural production on environmental elements, know the interactions of environmental and nature protection, and know current supporting programmes for agro-environmental management. Subject programme: Global environmental problems, basic concepts, the evolution of environmental protection. Natural resources, ecosystems, environmental pollution. Air pollution, protection against air pollution. Water pollution, protection against water pollution. Soil degradation. Soil pollution, soil remediation. Impacts of agricultural production on the environment. Basics of waste management. Renewable energy sources in agriculture. Nature conservation and agricultural production. Agricultural environmental management and rural development programmes.
6.	Precision Agriculture	Course objectives: Acquire theoretical knowledge and practical skills in the field of precision agriculture. The students know the most important systems, strategies, machines and IT background. Subject programme: History, tasks and economical importance of precision agriculture. Crop production technology. Basic IT knowledge of precision agriculture. Geographical information system. Global Positioning System - GPS systems. Data collection (from analysis of soils and residual nitrogen, and information on previous crops). Sensors and monitors of precision agriculture. Precision plant protection. Precision nutrient management. Precision water management. Tractors and agricultural machines management. Yield mapping and harvesting systems.

COMPUTER SCIENCE

We recommend our courses especially to those students who are majoring in Software Engineering or in a similar field at our university. Nowadays there is a short supply of professionals of programming skills in the labour market, therefore students of software engineering at the University of Nyíregyháza are often able to find a job even during their training. The university, which has 7 computer workrooms and excellent IT infrastructure, takes care of its students so as to let them acquire state of the art professional knowledge during their scholastic years. The courses recommended for Erasmus students are an integral part of the aforementioned training. The department primarily trains software development specialists, and the students acquire theoretical, methodical and technological expertise in that field.

Programme: Computer Science (Fall)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
1.	Digital Applications	BAI0001	3	Fall
2.	Linear Algebra	BPI2142	7	Fall
3.	Programming Languages I.	BPI1103	6	Fall
4.	Operations Research	BPI2143	7	Fall
5.	Network Operating Systems and IoT technology	BPI2144	4	Fall
6.	GUI programming	BPI2145	5	Fall

Programme: Computer Science (Fall)		
No.	Course name	Course description
1.	Digital Applications	Basic concepts of information technology, information theory, the main lines of information history. Characteristics of information and knowledge society. Computer operation, parts (hardware). Software types and features. Operating systems, utilities. Theoretical and practical steps in the production of digital content. Office software. Text editing, writing documents with word processing software. Basics of spreadsheets. Creating tables with office software. View numeric data using software. Copiable formulas. Analysing and displaying numeric data. Creating graphs. Presentation software, applications. Steps of making presentations, their content and form elements. Displaying visual and other digital formats in the presentation. Multimedia and its features. Internet development, Internet services. Browsers. Web 2. services. Characteristics of web-based communication. Web ethics, e-mail rules and ethical issues. Internet security issues. Mobile applications on different platforms. Dangers and ethical rules of using social media. Information retrieval on the net. Exercises based on information retrieval. Use of storage space and clouds.
2.	Linear Algebra	Vector spaces, subspaces, basis, dimension. Factor spaces, direct sum. Linear transformations, their matrices. Rank and nullity of a matrix. Determinant. The system of linear equations, Gauss elimination. Definition of eigenvalue and eigenvectors. Characteristics polynomials, Eigenspace, diagonalization. Euclidean space, linear transformations in Euclidean spaces.
3.	Programming Languages I.	Evolution of high-level programming languages. Classification of programming languages: imperative, declarative, special languages and languages based on other principles. Formal tools for syntax description. Basic symbols, lexical elements (symbolic names, labels, notes, comments, literals, etc.). Fixed and free format languages. Variables, named (or defined) constants, data types (built-in and user-defined types, primitive and derived types). Declarations, expressions, executable statements. Value setting, jumping, two and multiple-branch conditioning, loops. Program units (procedure/subroutine, function, block, package, task, header, etc.). Parameter assessment and transfer. Scope and lifetime. Compilation unit. Input-output file management. Abstract datatype. Generic programming. Parallel programming. Program development steps: compile, build, debug.

Programme: Computer Science (Fall)		
No.	Course name	Course description
4.	Operations Research	“Real-world” problems leading to Linear programming problem. Convex polyhedron and vertices. Simplex method. Sensitivity analysis. Duality. Transportation and assignment problems. Network problems. Non-linear programming problems. OR software tools (Excel-Solver, Lingo, CpLex, Gurobi, etc.)
5.	Network Operating Systems and IoT technology	Classification and operating principles of computer networks. Ipv4 and Ipv6 addressing. Network address allocation. Basics of network construction. Router, hub and switch operation. Maintaining basic network services (DHCP, DNS, WINS). Basics of network operating systems security. IoT's basics, sensors and their operation, their basic settings. SmartCity and BigData.
6.	GUI programming	User Centred Design. Principles of GUI designing. Visual programming environment. Basic GUI programming tools. Graphics applications' structure. Application window. Creating forms and controls based on the program. Dialogs. Message windows. Event-driven software development. Creating reusable software components. Data management, file management, database connection. Creating multimedia applications. Communication between applications. Making multi-threaded applications. Handling exceptions.

Programme: Computer Science (Spring)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
7.	Programming Languages II.	BPI1204	6	Spring
8.	Operating Systems	FPI2220	7	Spring
9.	Discrete Mathematics	BPI1207	6	Spring
10.	Database Systems	BPI1210	5	Spring
11.	Data Structures and Algorithms	BPI1208	3	Spring
12.	Programming Environments	BPI1223	3	Spring

Programme: Computer Science (Spring)		
No.	Course name	Course description
7.	Programming Languages II.	Main tools of object-oriented (OO) programming languages: class, object, encapsulation, inheritance, polymorphism, static and dynamic binding, message passing. Pure and hybrid OO languages. Procedural OO languages (Java, Eiffel, Smalltalk, C#). Functional (applicative) programming languages. Function as a programming tool. Referential transparency, function composition, recursion. Tools of a paradigm based on mathematical logic. Pattern matching, inference engine. Declarative OO languages. Data-driven programming, data-flow languages. Special and other languages. The main objective of this practice-oriented course is the acquisition of an OO language.
8.	Operating Systems	The operating system as an interface between users, user-applications and computer resources. Historical perspective of operating systems. Types of systems according to their functionality (simple batch, multiprogramming, time-sharing, real-time, embedded and distributed). Structure of operating systems. Processes, threads, scheduling. Deadlock (appearance, preventing, handling, Coffman-conditions). Input-output operations. File system: structure and implementation. Multi-processor and multi-kernel systems. Operating system updating in online mode. Safety and recovering.
9.	Discrete Mathematics	Basic concepts of set theory. Subset. Set operations and their properties. Relations and mappings. Algebraic structures. Some types of structures. Group, ring, free semigroup and group. Permutation groups. Implications of associativity and distributivity. Boolean algebra. Number theory basics. Divisibility and Euclidean division of integers. Unique prime factorization theorem for integers. Prime numbers. Number theoretical functions. Number systems. Linear Diophantine equation with two unknowns. Congruence. Theorem of Euler and Fermat. Linear congruence equation. Polynomial rings. Divisibility and Euclidean division of polynomials. Unique prime factorization theorem for polynomials. Fields. Rational numbers and their decimal fraction form. The fields of real and complex numbers. Operations with complex numbers. The fundamental theorem of algebra. The solution of quadratic and cubic equations. Finite fields. Basics of graph theory, trees, the shortest path, travelling salesman. Eulerian path and Hamiltonian cycle.

10.	Database Systems	Problems of conventional data handling. History of database systems. Data as a resource. Relational data model. Entity, attributes. Relation and connection. Key, foreign key, referential integrity. Constraints on a database. Data model, scheme, metadatabase, data vocabulary. Data description language (DDL) in SQL, CREATE TABLE and ALTER TABLE. Data manipulation in relational models, in relational algebra and relational calculus. SQL. Data query language: SELECT, ordering, filtering, grouping, many-table queries, differences between INNER and OUTER JOIN. Data modifications: INSERT, UPDATE, DELETE. Subqueries: IN, EXISTS, ALL, ANY. Linked subquery. View tables. Indexing – when to use? Active elements of databases: triggers, stored procedures. Authorization in SQL, the database administrator. ACID transactions, SERIALIZABLE and weaker transaction protection levels. Distributed databases and transactions. Database design: E/R model and its translation to the relational model. Functional dependencies and normalization, Boyce-Codd normal form. Anomalies in not normalized databases.
11.	Data Structures and Algorithms	Concept and classification of data structures. Operations on data structures: construction, insertion, deletion, order, search, data access and processing. Representation of data structures: continuous and distributed. Implementation of d.s. Application of d.s. Abstract d.s. Set, multiset, array, table, list, stack, queue, string, tree, graph, record.

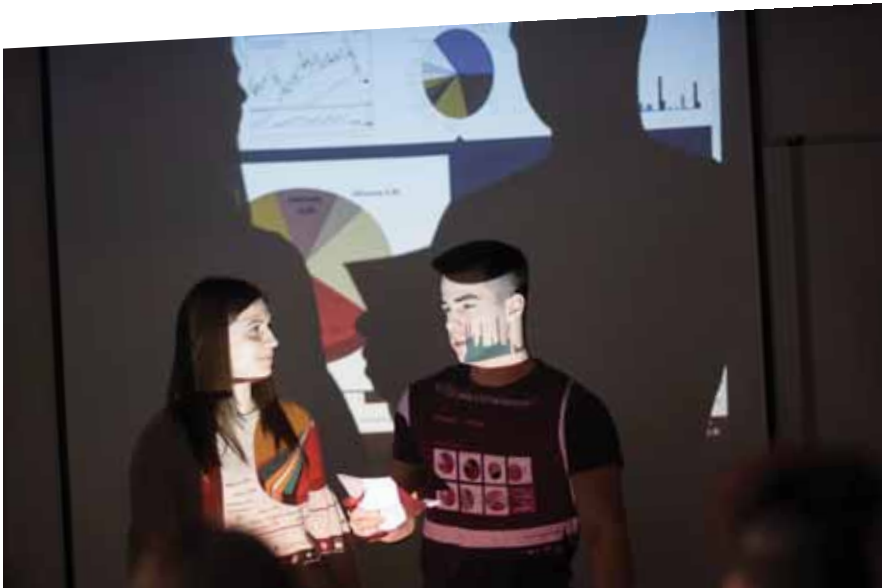
12.	Programming Environments	The course gives a general overview of software design tools and integrated development environments (IDE). Students become familiar with applying object-oriented software development methodologies in industrial and business environments. They acquire deeper knowledge of the usage of Visual Studio, one of the most popular integrated development environment (IDE). The course mainly focuses on C# programming language during the semester. Students have a clear view of industrial technologies they can successfully apply, such as NET framework, database management tasks and alternative programming environments. .Net Framework fundamentals, the introduction of Visual Studio, basics of Console class: read, write, conversion. Basic language elements, types, structures. Exception handling. References, classes. I/O: File handling, file system classes, event handling. Streams, compression. Collections, lists, dictionaries. Generic structures, custom collections. Introduction to Windows Form Applications, tasks. Database connections, MySQL.NET. Database management tasks, WPF. The alternative, PHP and JAVA-based programming environments, project tasks. Programming environments related to IoT technology and Cloud-based systems.

ECONOMIC SCIENCE

Our institution has played an active role in teaching Economic Science in Hungary's higher education for the last 22 years. We are bound by this tradition to offer a student-centred education of high quality and have a continuous development in Economic Science. Our primary goal is to train highly qualified specialists in Economic Science and Tourism with up-to-date professional knowledge who meet the requirements of the national and international labour markets in every walk of life while confirming our educational and research activities with their successes.

The structure and the syllabus of the courses, which are offered in Erasmus training, reflect the requirements dictated by academic development and free markets: they comply with the trends in today's world and in Economic Science. The lecturers of our department disseminate the knowledge of economics, enterprise economy, management, logistics, and information technology based on the foundations of modern economic science to students who are interested in preparing for and establishing their future managerial tasks. In our job, we are endeavouring to take the challenges of the 21st century into consideration and harmonize them with the current professional assumptions.

Knowledge. Success. Experience. These are the things waiting for you if you start building your professional career in Nyíregyháza with us.



Programme: Economic Science (Fall)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
1.	Business Communication (English, German, French, Russian)	BAI0052	4	Fall
2.	Marketing	BAI0057	5	Fall
3.	Economic Policy	BAI0056	4	Fall
4.	Accounting 1.	BGZ2160	5	Fall
5.	Basics of Finance	BGZ2161	5	Fall
6.	Statistics 1.	BGZ2162	5	Fall
7.	Sociology	BAI0041	3	Fall
8.	Digital Applications	BAI0001	3	Fall
9.	Sport games (tennis)	BSR2151	4	Fall
10.	International Tourism Geography	BFD2159	4	Fall
11.	Project Proposals and Implementation	BAI0053	4	Fall
12.	Knowledge of Engineering Logistics	BMG2207	4	Fall
13.	International Models of Integration and Inclusiveness (English, German, French)	BAI0059	4	Fall

Programme: Economic Science (Fall)		
No.	Course name	Course description
1.	Business Communication (English, German, French, Russian)	By the end of the term, students have a clear view of the basic situations the employees of foreign companies should be familiar with and acquire the fundamentals of foreign language technical terminology. Therefore they will have better chances of competing in the labour market. Knowledge: Having completed the course students know foreign language terminology related to the world of business and have an insight into the world of work through their acquired knowledge of the foreign language and culture. Ability: Students can communicate about related topics in the foreign language and react properly in the most common situations at the workplace. They are able to express their opinion orally (e. g. when telephoning, making arguments or giving presentations) as well as in writing (e. g. in business correspondence or reports) at the intermediate level. They are also prepared to write a CV and a covering letter and participate in a job interview, introducing themselves and presenting their professional background.
2.	Marketing	The course aims to raise students' awareness of the special features of the consciously created marketing system of business organizations. The importance of market orientation and consumer-oriented thinking. Understanding the economic significance of marketing. Practical application of market research methods. Parts of the marketing elements, (7P Product-Price-Place-Promotion-People-Physical evidence-Processing). Macro – and microenvironment trends, market segmentation. Consumer behaviour, and market research methods and their application (data collection and analysis). The characteristics of services, the HIPI principle. Knowledge: Students are able to organize and manage market activities of enterprises. They can also determine the information requirements of marketing decisions, make preparatory proposals and make decisions. Ability: Students know the elements of the marketing system of businesses, are able to design and implement a marketing strategy individually and are able to cooperate with representatives of other fields. They are also capable of examining consumer habits and consumer satisfaction.

Programme: Economic Science (Fall)		
No.	Course name	Course description
3.	Economic Policy	Presentation the connection between economy and politics. Views about economic policy. Ideologies and schools of economic policy. The system of decisions of economic policy. Actors of economic policy. The role of state and governments in the economy. The role of forms of property and its effects by economic policy. Competitive policy and the market of capital goods. The base of macro regulation. Budget and economic policy. The tax system and economic policy. Societal respect of economic policy. Knowledge: The student interprets the activity of the macroeconomic actors and its consequences. He/she can understand the mechanism of decisions of economic policy. He/she can understand the operation of economy policy views. Ability: He/she can use the macroeconomic concept, and he/she can transplant it into practice. He/she is interested in actual processes of economic policy, also in inland and internationally too.
4.	Accounting 1.	The aim of the course is to familiarize students with the basic concepts and interrelationships of accounting and information and management systems necessary for the operation of a company. The brief outline and topics of the course: The aim, concept and areas of accounting. The Hungarian legislation concerning accounting. Accounting reporting. Systems of bookkeeping and their sub-systems. The concept, content and importance of accounting service. Accounting policy, basic principles of accounting. Basic accounting in the system of double entry bookkeeping. The system and regulation of international accounting.
5.	Basics of Finance	Course description: Money formation; The concept, tools, functions and actors of economic policy and financial policy; Structure and control of the financial system; Banking (active, passive, neutral); Bank deposits, credits; Domestic and foreign payment methods; The Time Value of Money 1. By successfully completing the subject, the students acquire the basic knowledge of the operation of the financial system and provides the basis for financial calculations. Knowledge: they know about the relevant actors of basic of finance and the financial processes which they manage and the basic financial calculations. Ability: To understand facts and fundamental financial relationships, to formulate self-conclusions.

Programme: Economic Science (Fall)		
No.	Course name	Course description
6.	Statistics 1.	Introduction to the basic conceptual system of statistics. The legal framework of statistical service, the informational system of Hungarian statistics. Methods of gathering data, preparing data for analysis. Analytical methods of descriptive statistics: graphic presentation, ratios, averages, scatter index numbers, empirical distributions, concentration analysis, indexes. Knowledge: The candidates are familiar with the basic concepts and relationships of statistics and understand the methods of analysis. Abilities: They are able to observe and compare the social-economic phenomena and processes. They are also able to reveal interconnections and draw conclusions. Candidates are suitable for solving complex tasks of corporate and government level in a flexible manner.
7.	Sociology	The course offers an introduction to the field of Sociology and overview of its fundamental concepts. Its early origins, subsequent representatives. Conformity and deviant behaviour. Social structure and social changes in Hungary. Model of Ferge, Kolosi's L-model, Model of Szelényi. Systems of social stratification. The social structure in Hungary after 1990. Social mobility. Poverty and inequality. Types of social mobility. Ways of studying social mobility in Hungary. Theory of new social elite emerging in Eastern Europe. Knowledge: Students know the principles of the functioning of society. Ability: Students develop their comprehensive and practical skills.

Programme: Economic Science (Fall)		
No.	Course name	Course description
8.	Digital Applications	Basic concepts of information technology, information theory, the main lines of information history. Characteristics of information and knowledge society. Computer operation, parts (hardware). Software types and features. Operating systems, utilities. Theoretical and practical steps in the production of digital content. Office software. Text editing, writing documents with word processing software. Basics of spreadsheets. Creating tables with office software. View numeric data using software. Copiable formulas. Analysing and displaying numeric data. Creating graphs. Presentation software, applications. Steps of making presentations, their content and form elements. Displaying visual and other digital formats in the presentation. Multimedia and its features. Internet development, Internet services. Browsers. Web 2. services. Characteristics of web-based communication. Web ethics, e-mail rules and ethical issues. Internet security issues. Mobile applications on different platforms. Dangers and ethical rules of using social media. Information retrieval on the net. Exercises based on information retrieval. Use of storage space and clouds. Knowledge: Students know the IT tools and software that help their work. They are able to effectively apply state-of-the-art IT systems and tools in their field. Ability: Students are able to develop their knowledge independently, searching for the relevant information resources.
9.	Sports Games (Tennis)	The professional content of the course: Students become acquainted with the development and history of tennis and obtains some information about the role of this sport regarding the healthy way of life. Students receive theoretical and practical knowledge with which they are able to teach basic elements of tennis and adapt during games. This course should further provide a basis for a higher level of knowledge of this sport. Theoretical knowledge: defensive and offensive game, tournaments. Practical knowledge: service, volley, slice, short. Knowledge: Students have knowledge about the professional and formal possibilities of the application of the sport. They interpret the competition system and the structure of the association and student sport in its context. Ability: Students are able to apply the acquired organizational and management knowledge in an effective and practical way. They are able to cooperate.

Programme: Economic Science (Fall)		
No.	Course name	Course description
10.	International Tourism Geography	Students become acquainted with the economic and tourism geography of Europe and the rest of the continent's most frequented regions. Habits, culture and tourist attractions of the countries and regions are presented. Knowledge: Students know a great deal of geography and tourism. They learn what economic stimuli are available for tourism. Ability: Knowing customs and culture of host countries and regions, students are able to inform and guide guests of the sending countries during their tourism work.
11.	Project Proposals and Implementation	At the end of the term, students possess the foreign language skills required for special purposes that enable them to write project proposals and be engaged in their implementation. Knowledge: Students are familiar with presentation techniques and can understand and apply the basic terms of proposal writing in the foreign language. Ability: Students are able to work in project-teams and participate in project communication. They can perform tasks related to writing proposals and implementation of projects funded by the EU.
12.	Knowledge of Engineering Logistics	Goal: The main aim of the subject is that the students of agricultural and food industry mechanical engineering get acquainted with bases of modern logistics management in the matter of transportation, loading and storage processes. In addition, the students get insight into the planning of main logistic equipment. Subject programme: The concept of logistics. The logistics of a supply chain. RST processes. The features of loose substances and packets. The construction of fundamental engineering elements of continuous material handling machines, aspects of calibration and selection (belt conveyor, elevator, chain conveyor, scraper conveyor, screw conveyor, roller conveyor, tram-rail conveyor and vibrating element material flows). The calculation of continuous material transport equipment's performance and control of the function of the system. Knowledge: The student knows and understands the general contexts and interaction of logistic processes, and possesses the fundamentals of theoretical and methodological foundations necessary for that. He/she is aware of the importance of lifelong learning, the importance of planning of career, the opportunities of his vocational improvement. Ability: He/she is capable of the application, extension of logistic activities helping programmes and food economy processes. He/she is capable of technical modelling of production, product production systems and processes typical of food and agricultural processing.

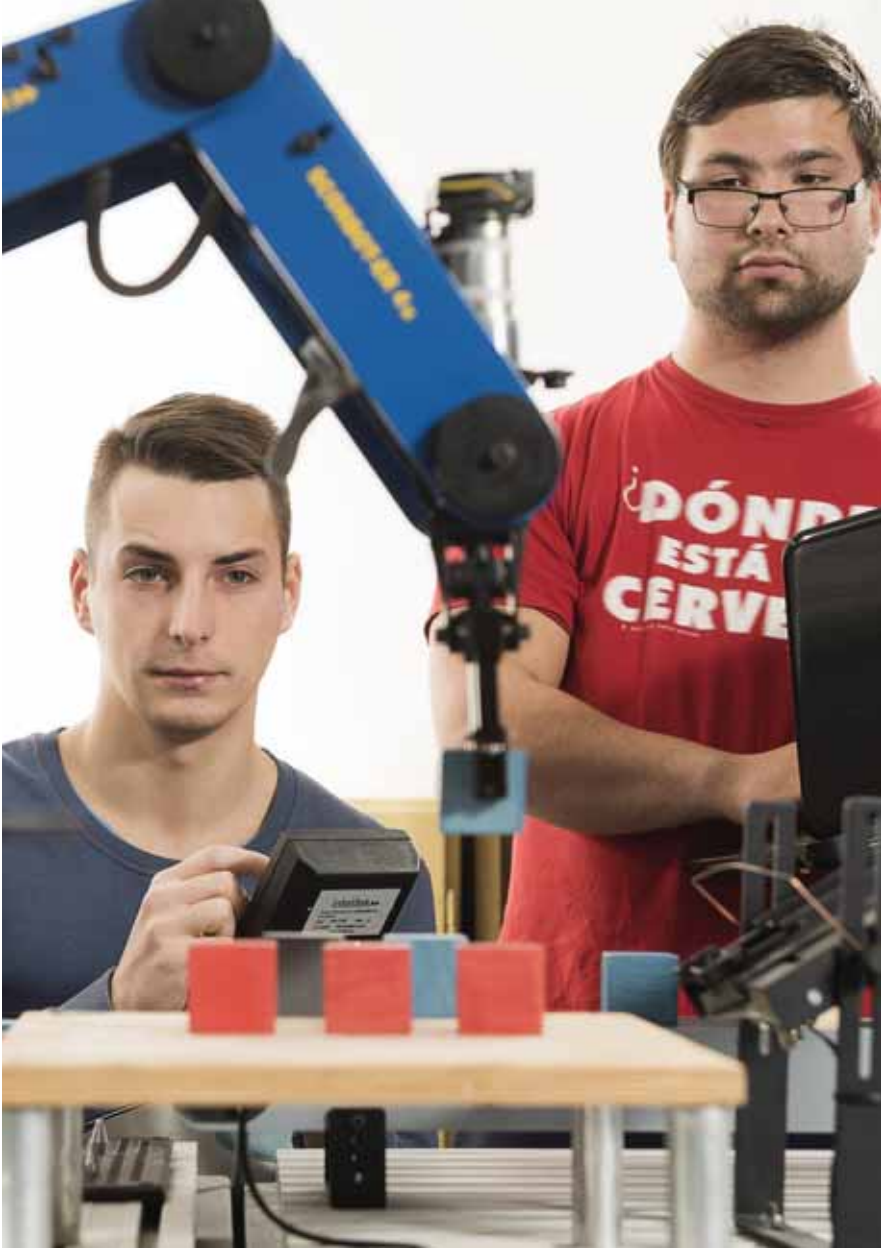
Programme: Economic Science (Fall)		
No.	Course name	Course description
13.	International Models of Integration and Inclusiveness (English, German, French)	Students become familiar with the foreign methods and European models of integration and inclusion at school level by reading and studying authentic sources in the foreign language. Knowledge: Students acquire the vocabulary of the field of study at the intermediate level they are well informed of the sources on the theory and practice of inclusion available in the printed and digital format. Ability: Students understand the main ideas of technical texts in the special field, are able to study and evaluate sources and obtain information independently.

Programme: Economic Science (Spring)				
No.	Course name	Course code	Credit	Semester
14.	Basics of Statistics	FTV2201	5	Spring
15.	System of Tourism	BTV2206	4	Spring
16.	International Accounting	MNT2232	4	Spring
17.	Historical Geography of the World Economy	BFD2261	4	Spring
18.	Environment and Sustainability	BAI0050	4	Spring
19.	Communication in the Office (English, German, French, Russian)	BKS2228	4	Spring
20.	Ethics (German)	BAI0063	4	Spring
21.	Operating Systems	FPI2220	7	Spring

Programme: Economic Science (Spring)		
No.	Course name	Course description
14.	Basics of Statistics	Introduction to the basic conceptual system of statistics. The legal framework of statistical service, the informational system of Hungarian statistics. Methods of gathering data, preparing data for analysis. Analytical methods of descriptive statistics: graphic presentation, ratios, averages, scatter index numbers, empirical distributions, concentration analysis, indexes. Introduction to the methodology of sample-based evaluation. Analytical examination of timelines, prediction. Knowledge: The candidates are familiar with the basic concepts and relationships of statistics and understand the methods of analysis. Abilities: They are able to observe and compare the social-economic phenomena and processes. They are also able to reveal interconnections and draw conclusions. Candidates are suitable for solving complex tasks of corporate and government level in a flexible manner.
15.	System of Tourism	Students will learn about the tourism system, general issues and specific characteristics of tourism development. Students will gain knowledge of the tourism system, subsystems, components of the system elements of the tourist offer and demand peculiarities, travel management and tourism marketing activities. They learn about travel motivations, travel habits, consumer trends, target groups of tourists. The international and domestic institutions of tourism are also familiar with the students. Knowledge: The student learns the system of domestic and international tourism. You will understand the functioning of the tourism system. Ability: The ability to identify stakeholders develops.
16.	International Accounting	Objectives of the course: Students will be familiar with the reasons for the differences in theoretical and practical regulation of individual national accounting systems, the main features of each major accounting system, and the possibilities of typing accounting systems. Short course content and topics: International Accounting Types: International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASC / IASB), the Generally Accepted Accounting Principles (US GAAP), other major national accounting systems (UK GAAP, Canadian GAAP), their rationality and relevance. Relationship of International Financial Reporting Standards (IFRS) and Hungarian Accounting Standards.

Programme: Economic Science (Spring)		
17.	Historical Geography of the World Economy	The course aims to introduce the main stages of the development of the world economy from the Stone Age up to the present day. The course covers the following topics: Interpretations and evolution of historical geography. General characteristics of economic development and their determining factors. Evolution of humankind and its spread across the globe and Europe. The process of transition from a nomadic lifestyle to agricultural production. Economic achievements and limits of ancient civilization. Economic and social development in medieval Europe. Economic and social foundations of modern Europe. The period of merchant capitalism and proto-industrialization. Prerequisites and concomitants of industrialization, and its social, economic, political, and cultural consequences. Main factors of economic development in the 19th century. Consequences of the two world wars and the 1929-33 crisis on the world economy in the 20th century. Knowledge: Students are familiar with the development of the world economy from the Stone Age up to the present day. Ability: Students are able to interpret present global economic processes in a historical context.
18.	Environment and Sustainability	Environmental problems cannot be solved in a sustainable way unless social and economic aspects are taken into consideration. This is one of the fundamental ideas of sustainability. This course should boost this attempt. Programme: Global environmental problems and their roots. Why sustainable development? Indicators of sustainable development. Ability: Students are capable of carrying out tasks related to the preparation and implementation of sustainability projects.
19.	Communication in the Office (English, German, French, Russian)	During the course, students acquire the fundamentals of technical terminology in English and become familiar with the most common forms of communication at the workplace. Knowledge: Students know the English language terminology related to the world of business. Ability: Students can communicate about related topics in the English language. They are able to express their opinion orally (e. g. when telephoning, making arguments or giving presentations) as well as in writing (e. g. in business correspondence or reports). They can also write a CV and a covering letter and participate in a job interview, introducing themselves and presenting their professional background in English.

Programme: Economic Science (Spring)		
20.	Ethics (German)	Hauptströmungen der europäischen Moralphilosopie. Typologie ethischer Systeme (Morallehren, formale Ethik, Persönlichkeitsethik, usw.). Moralphilosophische Argumentationen, Beweisführungen, theoretische Zusammenhänge der philosophischen Ergründbarkeit von Moral. Moderne Ethikrichtungen, ethische Dilemmas, theoretische Lösungsvorschläge. Kenntnisse: Studenten kennen die Grundbegriffe der Ethik und der Moralphilosophie und ihre Hauptströmungen. Fähigkeit: Studenten sind fähig, ihre Kenntnisse in der Erziehung adaptiv anzuwenden.
21.	Operating Systems	The operating system as an interface between users, user-applications and computer resources. Historical perspective of operating systems. Types of systems according to their functionality (simple batch, multiprogramming, time-sharing, real-time, embedded and distributed). Structure of operating systems. Processes, threads, scheduling. Deadlock (appearance, preventing, handling, Coffman-conditions). Input-output operations. File system: structure and implementation. Multi-processor and multi-kernel systems. Operating systems updating in online mode. Safety and recovering. Knowledge: Students know and understand the theoretical base of operating systems. The students' English language competence reaches the level required for professional tasks and continuous vocational training. Ability: Students are able to use theoretical and practical knowledge and skills acquired during the course in order to choose the most suitable OS, to install it, then to use and control it.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ENGINEERING SCIENCES

As technical engineers of natural sciences, they are suitable for engineering design of machines, appliances, equipment, structures, professional management and implementation of machine technology operations, the creation, maintenance and development of quality management systems.

Programme: Engineering Sciences (Fall)				
No.	Course name	Course code	Credit	Semester
1.	Mechanics I.	BAI0140	7	Fall
2.	Engineering Informatics	BAI0143	4	Fall
3.	Machine Parts I.	BAI0144	5	Fall
4.	Electronics and Electrical Engineering	BAI0145	6	Fall
5.	Automatization and Control I.	BAI0084	4	Fall

Programme: Engineering Sciences (Fall)		
No.	Course name	Course description
1.	Mechanics I.	Objective: By passing the course the student knows basics of statics of mass point, rigid body, is able to understand problems in statics, describe stress plots of rigid bars, perform verifying and dimensioning in case of simple stress states. Concepts of mechanical models, branches of mechanics. Statics of mass point. Force, force systems in space, plane and lineside, reducing force systems. Statics of the rigid body. Equilibrium force systems, Definitions and classification of boundary conditions. Calculation of reaction forces in case of plane problems and spatial trusses. Reducing a parallel force system, weight. Load and stress, stress functions, stress plots. Friction, Coulomb-law of friction, equilibrium in presence of friction. Stability of equilibrium. Statics of deformable body, displacement, deformation, stress. Verifying and dimensioning. The second moment of area, transformations of 2nd moments of area, Steiner's theorem, additivity, eigenvalue problem, Eigensystem, inertial radius. Simple stress states of bars, push and pull, regular bending, torsion of bars with circle and ring cross section, pressed thin bars.
2.	Engineering Informatics	Understanding the design of computers and IT systems and their major processes. The hardware structure and software pyramid elements. Network connections for computers and the basics of their operation. Implementing general programming basics, basic algorithms and control structures in different programming languages. Hardware (hardware, scanner, plotter, 3D Meter, Prototype printer, etc.) related to engineering (design, manufacture, control) and their software. Knowledge and application of general statistical programs (SPSS, MathLab). The process and the steps of the project design. Basic concepts of information theory and system theory. The concept and types of information systems. Corporate Management Information Systems (ERP). Management Information System (CIS). Electronic commerce, electronic business management systems. Logistics Systems.

Programme: Engineering Sciences (Fall)		
No.	Course name	Course description
3.	Machine Parts I.	Objective: Developing the technical perspective and the visual acuity of the students. In the framework of the mechanisms, the methods of movement, the coordination of movements and the interpretation of balance. The machine parts section needs to develop scaling and design skills along with the development of appropriate drawing skills. The concept, the elements, the classification and the freedom degree of the mechanisms. Classification of kinematic chains and kinematic pairs. Grashof's law. ASSUR classification of plane moving mechanisms. Kinematic examination of the mechanisms. Speed and acceleration plans. Burmeister's theorem. Momentan Centers. Speed and acceleration for members with complex motion. Mechanisms with cams. Camshaft driving. Graphic differentiation and integration. Dynamic examination of plane moving mechanisms. Classification of forces acting. Determination of reaction forces in elemental groups. The inertial force acting on one member of the mechanism. Balancing of plane moving mechanisms. Machine elements. Screw connections. Mechanics of screws. Wedge and latch bonds. Nose and bolt attachments. Shrink. Rivet Joints. Welded joints. Axes. Plain bearings: lubrication theory, bearing structures, dimensioning, installation. Rolling Bearings.
4.	Electronics and Electrical Engineering	The laws of electrostatics. DC circuits. AC circuits. Impedance, electrical power, power factor correction. Resonant RLC circuits. Serial and parallel resonant circuits performances. Three phases circuits. Star-Delta connections. Specific characteristics. The magnetic field. Magnetic forces, magnetic B-field, magnetic H-field, magnetic flux. Changing the magnetic flux, electromagnetic induction. Faraday's law. Single phase and three phases transformers. P and N type semiconductors. PN junction. Diodes, transistors, thyristors and triacs. Rectifiers. Bipolar and field effects transistors. How they work. Basic connections of transistors. Input-output characteristics, load line and operating point. Amplifiers. Negative feedback in amplifiers and its effects. Integrated circuits. Operational amplifiers. Basic circuits, inverting and non-inverting amplifiers.

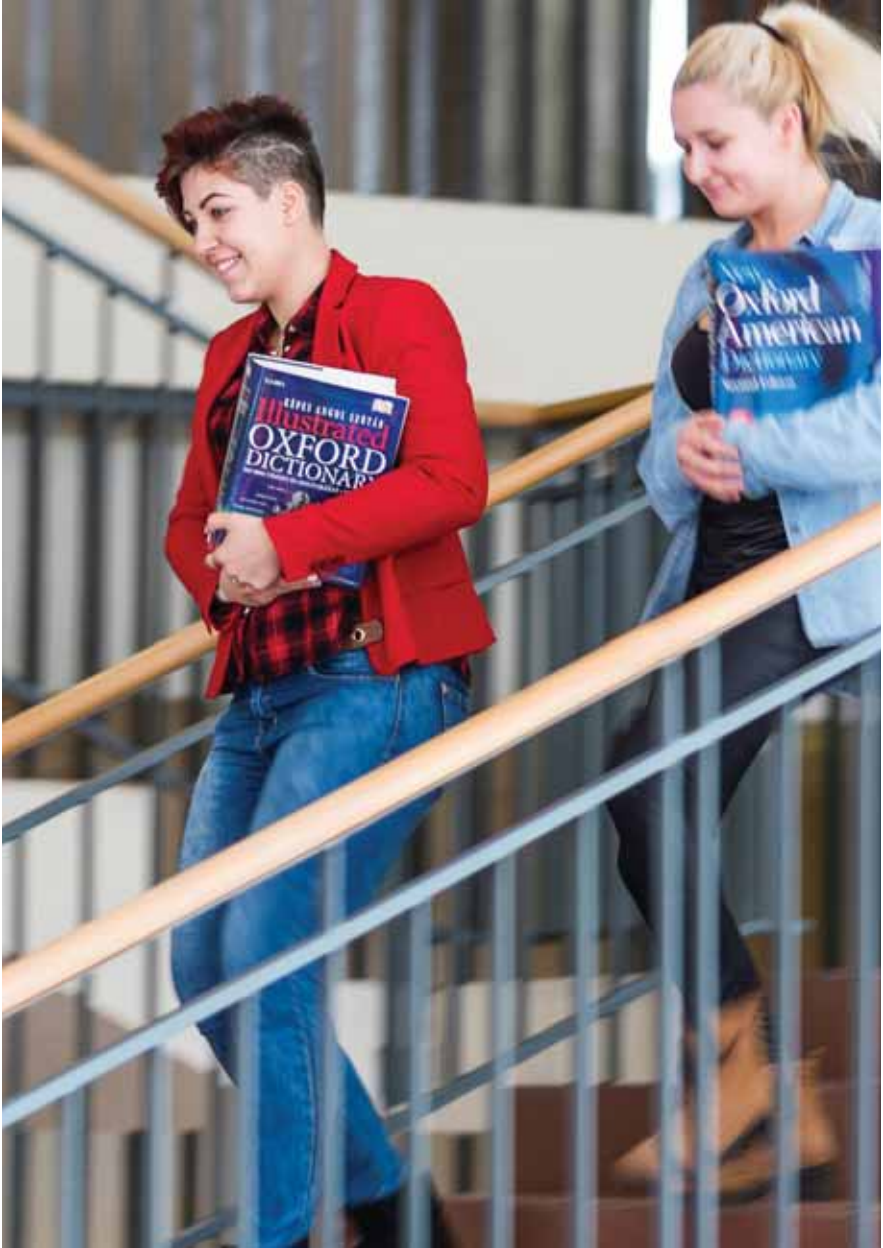
Programme: Engineering Sciences (Fall)		
No.	Course name	Course description
5.	Automatization and Control I.	Introduction to Control engineering theory. Basic concepts. Elements, signals and features of the Control System. Analog, digital and sampled signals. Open loop control systems. Block diagram, elements, signals and characteristics. Types of controls. Actuators. Electric (contactors, relays, motors), pneumatic and hydraulic actuators and their applications. Sensor elements. Resistive, optical, inductive, capacitive, piezoresistive and ultrasonic sensors. Control elements and indicators. Controllers. Basic circuits of control systems. Wired control, and circuit. Simple controls: self-holding, change of direction, Star/Delta-switch. Digital controllers. Logical functions, status equations. Wired controls. Create a power plan. Pneumatical controls. Valves and pneumatic circuits and symbols. Programmed controls. PLC structures, microprocessors and microcontrollers, registers and memories. Relationship with the control device. Digital input and output. A/D-D/A converter, analogue IO channels. Timers and counter functions. Program development. Ladder logic diagram, instruction list and sequential programming methods.

Programme: Engineering Sciences (Spring)				
No.	Course name	Course code	Credit	Semester
6.	Mechanics II.	BAI0141	7	Spring
7.	Basics of CAD	BAI0075	3	Spring
8.	Basics of FEM	BAI0146	5	Spring
9.	Machine Parts II.	BAI0147	6	Spring
10.	Knowledge of Engineering Logistics	BMG2207	4	Spring
11.	Automatization and Control II.	BAI0086	5	Spring

Programme: Engineering Sciences (Spring)		
No.	**Course name**	**Course description**
6.	Mechanics II.	Objective: By passing the course the student knows principles of statics of flexible body, dynamics of mass point and rigid body, is able to perform verifying and dimensioning in case of complex stress states of bars, describe the general motion of the mass point, and special motions of a rigid body. Bars with general stress state. Skew bending, pull-push and bending, eccentric pull-push of bars. Dimensioning for stress peak in case of general stress state, stress theories, Mohr's theory, HMH theory. Bending and shear, pull bend and torsion. Work-energy principles in statics, Betti's theorem, Castigliano's theorem. Kinematics of the mass point: motion law, displacement, velocity, acceleration. Kinematics of special motions. Uniform motion, accelerating motion, round motion, harmonic vibration. Kinematics of a rigid body, instant motions, finite motions. relative motion. Principles of dynamics. Dynamics of the mass point: equation of motion, linear momentum, kinetic energy, work, potential energy, conservation of mechanical energy. Dynamics of a rigid body: centroid, linear and angular momentum, their conservation, conservation of mechanical energy. Moment of inertia. translation and rotation of the rigid body. Pendulum. Top.

7.	Basics of CAD	Basic concepts related to CAD systems. The architecture of CAD systems, hardware and software components. Computer Drawing Systems. Development of computer product design. Integrated Design Systems CAD / CAM / CAE. The process of product development. Conceptual design in CAD environment. Top-down design. Creating 2D profiles. Sketching. Create and modify basic elements. Geometric constraints. Making technical drawings (projections, engravings, scaling). Geometric modelling based on algebraicity. Create, modify, store wireframes, surface and body models. Creating and modifying extruded rotation and translational bodies. Part modelling. Make compositions. Standard items that can be obtained from the Content Centre. Manufacturers' catalogues and their use on the Internet. Illustrating models, visibility algorithms. Illumination, shading, photorealistic rendering. Work in a virtual reality environment. CAD / CAE analytical procedures. Finite element method. Product Lifecycle.
8.	Basics of FEM	Objective: By passing the course the student knows principles of finite element analysis and simple computational applications. Programme of discipline: Brief history of finite element method. Principles of variational calculus. Variational principles of mechanics. Principles of numerical methods. Stiffness equation of elements and a system. Types of finite elements. Computational applications.
9.	Machine Parts II:	Objective: Developing the technical attitude of students. Develop skills in the selection and dimensioning of more frequent machine parts and machine structures. Developing standardization knowledge. Design, dimensioning and drawing of complex machines. Programme of discipline: Drives in general. Clutches. Mechanical conditions of endless belt drives. Flat belt drives. V-belt drive. Friction drive. Chain drives. Gear drives theory. Classification of toothed shoots. Concealment, switching line, switch number. Geometrical dimensioning of spur gears. Cervical profile, evolvable. Submersion and ways of avoiding it: compensated and general toothing. Relative slip. Forces in the toothed drive. Strength grading of gears. Classification of toothed gears. Internal gears with cylindrical gears. Inclined teeth cylindrical gears. Front screws. Bevel gear drives. Worm gears.

10.	Knowledge of Engineering Logistics	Objectives: The main aim of the course that the mechanical engineering students familiarize themselves with the fundamental of logistics, supply chain management, continuous and fractional materials handling systems. Subject programme: Concept of logistics, logistical systems, material carriaging systems, storing systems. Transporting systems of goods. Forwarding; purchase logistics; production logistics; distribution logistics; logistics of waste handling. Logistical information and management systems. General questions of the planning of logistical operation; information for logistical planning. Transporting task; round tour exercise; line planning lessons; network planning task. Stockpiling models; simulation.
11.	Automatization and Control II	Introduction to Control engineering theory. Basic concepts. Elements, signals and features of the Control System. Analog, digital and sampled signals. Open loop control systems. Block diagram, elements, signals and characteristics. Types of controls. Actuators. Electric (contactors, relays, motors), pneumatic and hydraulic actuators and their applications. Sensor elements. Resistive, optical, inductive, capacitive, piezoresistive and ultrasonic sensors. Control elements and indicators. Controllers. Basic circuits of control systems. Wired control, and circuit. Simple controls: self-holding, change of direction, Star/Delta-switch. Digital controllers. Logical functions, status equations. Wired controls. Create a power plan. Pneumatical controls. Valves and pneumatic circuits and symbols. Programmed controls. PLC structures, microprocessors and microcontrollers, registers and memories. Relationship with the control device. Digital input and output. A/D-D/A converter, analogue IO channels. Timers and counter functions. Program development. Ladder logic diagram, instruction list and sequential programming methods.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ENGLISH LANGUAGE AND CULTURE

The Department of English Language and Culture offers courses for students who wish to become teachers of English in a primary school. The length of this programme is 4+1 years. At the end of the 4th year, students take a comprehensive exam, after which they begin their practice year in a primary school. The English major programme offers a variety of courses covering the following broad areas: 1) Language skills development, 2) the literature, history and culture of English-speaking countries, 3) English linguistics, 4) the methodology of teaching English. Below you can find a 28-course selection out of the 43 courses of the Department.

Programme: English Language and Culture (Fall)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
1.	Receptive skills. Text Comprehension I.	ANO1001	2	Fall
2.	Productive Skills I. Writing skills	ANO1003	2	Fall
3.	Productive skills III. Speech practice	ANO1005	2	Fall
4.	Language Skills Development. Vocabulary Building	ANO1007	2	Fall
5.	Basics of Grammar. Use of English	ANO1008	2	Fall
6.	English Linguistics I. Introduction to Linguistics.	ANO1009	2	Fall
7.	Language and Society I. Varieties of English	ANO1010	2	Fall
8.	British Literature I. Introduction to Literature	ANO1011	2	Fall
9.	The Culture of English-Speaking Countries. Introduction to British Culture	ANO1013	2	Fall
10.	American Civilisation. Introduction to American Culture	ANO1014	3	Fall
11.	British Literary History IV. English Drama	ANO1103	2	Fall
12.	English Descriptive Grammar III. The English Verb	ANO1108	2	Fall
13.	British Civilisation I. The History of the British Isles	ANO1112	3	Fall
14.	American Civilisation	ANO1113	2	Fall

Programme: English Language and Culture (Fall)		
No.	Course name	Course description
1.	Receptive skills. Text Comprehension I.	The objective of the course is to familiarize students with authentic texts and voiced recordings that they might meet in everyday life. A further goal is expanding vocabulary; getting to know the structural characteristics of written and audio texts, and developing text comprehension competences, realised through the individual, pair-work and class-level analysis of texts of different topics and registers. Competences to be developed: enabling students to reach a level of competence C1 in CEFR system in the target language; they should be able to use the rules of the target language with confidence; the improvement of receptive skills; the interpretation of written/audio in context and selecting the essential information.
2.	Productive Skills I. Writing skills	The objective of the course is to familiarize students with different text types and ways of producing them (with special emphasis on letters and essays). The expected level of written materials target the C1 level of CEFR. The practical aim of the course is to prepare students for the end-of-the-year Filter Exam. Competences to be developed: the student should be able to communicate writing at a high level (C1 of CEFR), to use English in an easy, correct and confident way suited to the appropriate context; the students should know the basic rules of English, its registers and apply the target language in a suitable context.
3.	Productive skills III. Speech practice	The aim of the practical course is to provide speaking opportunity for the students of English about different everyday (family, education, work, sports, spare-time activities, travelling culture, entertainment, environment, social life) topics and topical issues (family models, feminism, the challenges of information technology, life-long learning etc.) The main emphasis is devoted to the development of communication competence which is not possible without enriching vocabulary, acquiring correct pronunciation and intonation. Students should be competent in expressing their thoughts correctly, clearly and adequately, they should be able to argue and support their standpoints in front of a smaller or larger audience, they should be familiar with different levels of formality, with meanings and shade of meanings.

Programme: English Language and Culture (Fall)		
No.	Course name	Course description
4.	Language Skills Development. Vocabulary Building	The objective of this practical course is to help students enrich their vocabulary, to exercise word formation (prefixes, suffixes, compounds, conversions, derivation, synthetic word formation), to teach as many phrasal words, idioms and proverbs as possible, to demonstrate that contexts are able to change the meaning of the word.
5.	Basics of Grammar. Use of English	The aim of the practical course is to help the students of English to become accurate users of English who are able to use the structures of passive voice, causative, sequence of tenses, modal verbs, conditional sentences, prepositional phrases, idioms and a wide range of vocabulary correctly and adequately
6.	English Linguistics I. Introduction to Linguistics.	The objective of the lectures is to provide basic knowledge about the general questions of linguistics, its areas and research methods so that the students should synthesize the knowledge about its areas as parts (descriptive linguistics, text linguistics, pragmatics, semantics, stylistics, etc.) and they should view it as a whole
7.	Language and Society I. Varieties of English	The course aims to present the regional and social varieties of English and demonstrates the phonetic, phonologic, morphologic and lexical differences among them. It also presents those conditions which resulted in the formation of these varieties

Programme: English Language and Culture (Fall)		
No.	Course name	Course description
8.	British Literature I. Introduction to Literature	The objective of the course is to familiarise students with the basic concepts of literature, the modern tendencies of the analysis of fiction, poetry and drama, with the help of which they are able to participate effectively in later seminars dealing with British and American literature. The subject includes familiarity with the changing concept of the study of literature, gives an overview of the main branches of the discipline, and their relationship to each other. Emphasis is laid upon basic textological, philological and poetic concepts, also touching upon questions of literary criticism, literary canons and literary cults. Competences to be developed: knowledge of the intellectual and artistic currents of the English-speaking cultures; the student is able to place literary works written in English and pertaining critical literature in the context of cultural and historical trends.
9.	The Culture of English-Speaking Countries. Introduction to British Culture	The objective of the course is to give an insight into the culture and everyday life of the United Kingdom and Ireland. They are expected to make differences between political and geographical concepts like the United Kingdom, Great Britain and the British Isles. Students are expected, in possession of their language skills obtained so far, to orientate themselves in the culture of the British Isles. The UK and Ireland are two EU member states during the study of which the student as a teacher candidate is familiarised with the role of these countries in shaping European values. Competences to be developed: cultural and intercultural competences, getting to know the culture of the British Isles, widening the scope of knowledge about English-speaking countries.
10.	American Civilisation. Introduction to American Culture	The objective of the course is to introduce students to the culture of the United States and Canada. Since the US has a determining impact in the globalizing world of the 21st century, it is essential that students as future teachers know the basic components of North American culture. Competences to be developed: getting to know the culture of the USA and Canada; getting to know the values and lifestyle represented by these countries, developing cultural and intercultural competences.

Programme: English Language and Culture (Fall)		
No.	Course name	Course description
11.	British Literary History IV. English Drama	The objective of the course is to familiarise with the landmarks of the history of British drama, which, together with subjects on British novel and poetry, gives a comprehensive picture about the main phases of literary history, their outstanding authors and works. Competences to be developed: the student should know the main cultural and art tendencies and representational forms and should be able to use them effectively and in a motivating way in language teaching.
12.	English Descriptive Grammar III. The English Verb	The central topics of the course include the types of verbs, that is the main verbs and verbs in auxiliary function, together with the logical categories of the verb: tense, mood, aspect and voice. The acquisition of the complex issue of modality also occupies a central position. By this time students have already acquired the basic linguistic terminology, as a result of the course entitled Introduction to linguistics taken in the previous term.
13.	British Civilisation I. The History of the British Isles	The objective of the course is to introduce students to the most important historical events of the peoples living in the British Isles. Though the majority of the lectures deal with English history, the history of Ireland, Wales and Scotland will also be touched upon. The course highlights those economic, social and cultural historical events that lay a foundation for English studies and the knowledge of which are indispensable for anyone specialising in English language and culture. During the seminars, students deal with the analysis of individual historical events with the help of documentary films, sources and role play. Students also master expressions that characterise historical texts, which helps them understand the news of the 21st century more. The knowledge of the history of the British Isles is essential to understand architectural symbols such as Stonehenge and Hadrian's Wall. Deepening historical awareness is also important so that student should recognize the exaggerations and contradictions of Hollywood films. Studying the history of the British Empire helps students to understand the English traditions of Canada, Australia and other former colonies. Studying the events of the 20-21st centuries help one to understand the ambitions and perspective of global powers, also as regards their relationship with Hungary.

Programme: English Language and Culture (Fall)		
No.	Course name	Course description
14.	American Civilisation	The course is organised with the aim of giving the students insight into the history of the United States from the very beginning to the present day. The lectures give a brief overview of the role, the traditions and the ethical principles of the Anglo-Saxon Protestant majority and those of the Catholic (Hispanic, Italian, Irish and German) and African American minorities, but the greater part of the lectures contain a chronological overview of the history of the United States. The seminary sessions deal with the analysis of different source language texts.

Programme: English Language and Culture (Spring)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
15.	British Civilisation II. Anglo-Hungarian Cultural Contacts	ANO1115	2	Spring
16.	Receptive skills. Text Comprehension II.	ANO1002	2	Spring
17.	Productive skills II. Essay Writing	ANO1004	2	Spring
18.	Reading Literary Texts	ANO1012	3	Spring
19.	British Literary History II. The English Novel	ANO1101	2	Spring
20.	British Literary History III. English Poetry	ANO1102	2	Spring
21.	Literary Trends in the 20th Century	ANO1104	3	Spring
22.	American Literature. Landmarks in American Literature	ANO1105	2	Spring
23.	English Descriptive Grammar II. Morphology.	ANO1107	2	Spring
24.	English Descriptive Grammar IV. English Syntax	ANO1109	2	Spring
25.	English Linguistics I. The History of English	ANO1110	2	Spring
26.	Sociolinguistics and Psycholinguistics	ANO1111	2	Spring
27.	Language Development I. Pragmatics	ANO1116	2	Spring
28.	Language development IV. Presentation skills	ANO1119	2	Spring

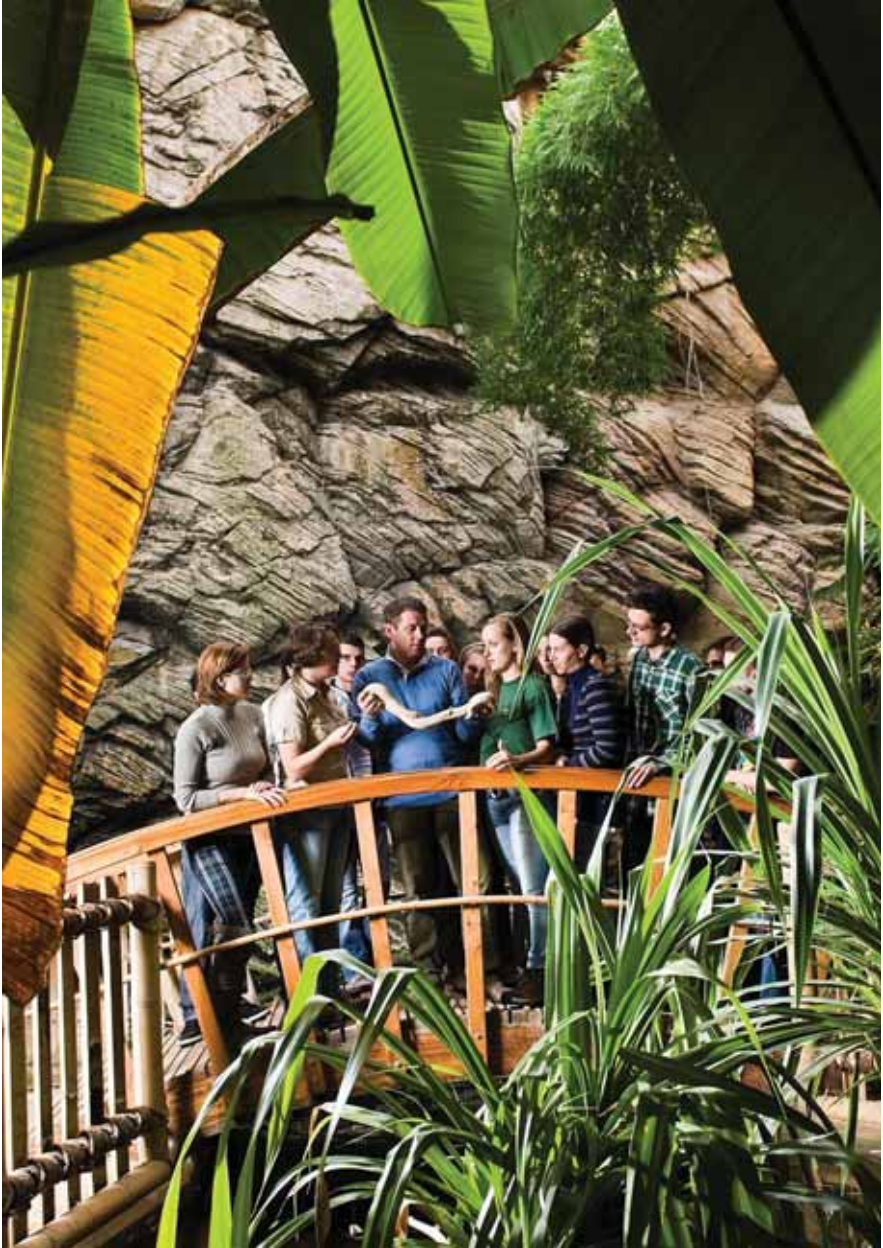
Programme: English Language and Culture (Spring)

No.	Course name	Course description
15.	British Civilisation II. Anglo-Hungarian Cultural Contacts	The course familiarises the students with the history, diversity and today's/contemporary developments of Hungarian English relationships. The theoretical lessons will comprise the following tasks: the analysis of documents, first of all, travelogues and translations of literary texts, which will serve as an introduction to the English Hungarian cultural relations. Due to the complexity of the subject, historical, cultural and literary aspects as well as aspects of institutional history, including dynastic marriages, protestant peregrinations, works by Hungarian and English travellers, politicians (Szepsi Csombor Márton, Bethlen Miklós, Széchenyi, Wesselényi, Bölöni, Szemere, John Paget, Miss Pardoe, etc.) will be touched upon. The course will also deal with the outstanding personalities of the English Studies in Hungary.
16.	Receptive skills. Text Comprehension II.	As a follow-up to the similar course in the first semester, the objective of this course is to familiarise students with authentic texts and voiced recordings that they might meet in everyday life. A further goal is expanding vocabulary; getting to know the structural – and in this phase of the course, stylistic – characteristics of written and audio texts, and developing text comprehension competences, realised through the individual, pair-work and class-level analysis of texts of different topics and registers. Competences to be developed: enabling students to reach a level of competence C1 in CEFR system in the target language; confidence in understanding and using different styles and registers, and comprehending the metatextual references in the text (humour, irony, etc.); the improvement of receptive skills; the interpretation of written/audio in context and selecting the essential information.
17.	Productive skills II. Essay Writing	The course, as a continuation of a previous course on developing writing skills, aims to present the methods and principles of academic writing and thus to prepare students to be able to write their home papers, essays and finally their thesis in an adequate way.

Programme: English Language and Culture (Spring)		
18.	Reading Literary Texts	This is a follow-up seminar to the lecture Introduction to Literature. It familiarises students with literary works as examples of possible worlds, making the accept the imaginary situation and convention. The literary works to be discussed are essentially examples of fiction, poetry and drama, also including examples of cross-genres. It deals with fiction as a coherent context of individuals, relationships and actions, and poetry as the special relationship of the subject and the world where motifs, symbols, tropes and figures have a special role. Discussions follow a multi-disciplinary approach, blending historical, theoretical (reception theory, genre theory, prosody, methodological), linguistic, stylistic, pragmatic, intertextual, cultural aspects. Competences to be developed: The subject aims at students viewing the literary work as connected to other manifestations of the target culture, and as a teacher candidate, develop students' personalities, knowledge and skills with the help of literary works. The subject is suitable for the improvement of self-education, commitment and personal autonomy, together with the improvement of productive language use.
19.	British Literary History II. The English Novel	The objective of the course is to familiarise with the landmarks of the history of the British novel, which, together with subjects on British poetry and drama, gives a comprehensive picture of the main phases of literary history, their outstanding authors and works. Competences to be developed: the student should know the main cultural and art tendencies and representational forms and should be able to use them effectively and in a motivating way in language teaching.
20.	British Literary History III. English Poetry	The objective of the course is to familiarise with the landmarks of the history of British poetry, which, together with subjects on British novel and drama, gives a comprehensive picture about the main phases of literary history, their outstanding authors and works. Competences to be developed: the student should know the main cultural and art tendencies and representational forms and should be able to use them effectively and in a motivating way in language teaching.
21.	Literary Trends in the 20th Century	The objective of the course is to introduce students to those literary, cultural and philosophical tendencies that contributed to the shaping of literary consciousness in the 20th century. Competences to be developed: the student should know the main cultural and art tendencies and representational forms and should be able to use them effectively and in a motivating way in language teaching.

Programme: English Language and Culture (Spring)		
22.	American Literature. Landmarks in American Literature	The course aims to present the timeline development of American literature focussing on mile-stone events, major representatives and various trends.
23.	English Descriptive Grammar II. Morphology.	The course will provide an introduction to the basic notions of morphology, the principles and trends in morphology. It will provide a theoretical basis for the structural classification and the syntactic and semantic functions of nouns and noun phrases. The course deals with the nominal phrase in detail. Attention will be devoted to the structure of the noun phrase (head, determiner, modifier), the differences between the English and the Hungarian structures. It will also discuss the adjective phrases, adverb phrases and prepositional phrases, as well as the most productive word formation processes and the rules of word formation.
24.	English Descriptive Grammar IV. English Syntax	The main objective of the seminars is to expose students to the basic areas of English syntax bearing in mind similarities and differences between Hungarian and English. Would-be teachers of English are expected to be familiar with English phrase structures and constituents of sentence elements. Relying on examples and tasks, students acquire and practise certain theoretical knowledge. Verbs deserve special attention since their complements - typically from 1 to 3 - realize particular sentence elements.
25.	English Linguistics I. The History of English	The objective of the course is to familiarise students with one of the characteristic features of languages, the process of constant change and those internal and external factors as a result of which English as a language developed. The diachronic overview of English helps students to understand the present-day varieties of English, shedding light on new aspects. Competences to be developed: the course helps to broaden students' perspective and to understand interdisciplinary approaches; develops linguistic awareness, cultural and intercultural competences; the explanation of synchronous phenomena with diachronic reasons; high level of language competence.

Programme: English Language and Culture (Spring)		
26.	Sociolinguistics and Psycholinguistics	The course intends to provide the students with basic knowledge about sociolinguistics (the area investigating the relationships between language and society) and psycholinguistics (the area investigating the relationships between language and the mind). This knowledge is necessary for solving pedagogical problems of language teaching.
27.	Language Development I. Pragmatics	Pragmatics is the discipline strongly related to social practices as it studies the relation of signs to interpreters. It studies language from a functional perspective and attempts to explain certain aspects of the linguistic structure by reference to non-linguistic pressures.
28.	Language development IV. Presentation skills	The aim of the course is to train confident and efficient presenters who master the skill of oral communication being able to take into consideration the content, the audience, the occasion and the goal of communication. Using multi-media, slides and the Internet is also a targeted scope of the course.



ENVIRONMENTAL SCIENCES

Our courses in the fields of Biology, Geography and Environmental Sciences cover several leading topics in these disciplines by lecturers who actively carry out nationally and in most cases internationally respected researches in them. Our specific laboratories and long-term field studies provide proper infrastructure and opportunities for education and for researches as well. The suggested courses let students acquire practical skills over the relevant theoretical backgrounds by the opportunity to participate directly in researches carried out in wide international and national cooperation.

Programme: Environmental Sciences (Fall)				
No.	Course name	Course code	Credit	Semester
1.	Zoology II.	BAI0061	5	Fall
2.	Experimental Aquatic Ecology	BBI2113	4	Fall
3.	Nature Conservation III. (Conservation Biology)	BKT2214	4	Fall
4.	Behavioural Ecology I.	BBI2111	5	Fall
5.	Cartography and Projections	BFD2156	4	Fall
6.	Physical Geography I.	BFD2157	4	Fall
7.	Basics of Spatial Development	BFD2160	4	Fall
8.	International tourism geography	BFD2159	4	Fall
9.	Geopolitics and globalization	CB3325	2	Fall

Programme: Environmental Sciences (Fall)		
No.	Course name	Course description
1.	Zoology II.	Aim: To know and to identify the most important vertebrates and invertebrates in the monitoring practice. Content: To recognise and to identify in nature the most abundant and relevant arthropoda, fish, amphibian, reptilian and mammal species in our local environment and in the Carpathian basin, to know their most important characteristic properties.
2.	Experimental Aquatic Ecology	The course deals with the phenomena of aquatic ecology that can be easily demonstrated under laboratory conditions. In the practical course, students learn to plan experiment designs and statistical analyses of data. The influence of abiotic factors (nitrogen, phosphorus, microelements, light intensity) on the interactions between aquatic plants. Experimental analyses of biotic factors (interspecific and intraspecific competition) between algae and aquatic plants.
3.	Nature Conservation III. (Conservation Biology)	On the basis of former courses, students know the history, basic questions, tasks, methods, main relationships, processes and research areas of conservation biology. Students are able to interpret and explain local, regional and global conservation problems and their handlings. History and recent state of Conservation Biology. Biological diversity and processes behind its decline. Habitat destruction, fragmentation and degradation. The role of alien species, fishing, hunting and trading behind the loss of species. Conservation of the populations, communities, habitats and landscape. The problem of small populations. Population viability analysis. Biodiversity Monitoring. In situ and ex situ conservation. Priorities in the designing of protected areas. Habitat management and reconstruction. Landscape protection. Society and biological diversity. Nature conservation and sustainable development. Local, national and international cooperation in the protection of species and habitats.

Programme: Environmental Sciences (Fall)		
No.	Course name	Course description
4.	Behavioural Ecology I.	Students understand the ecological and evolutionary factors that influence the behaviour of animals. The definition of behaviour inherited and learned behaviours, types of learning, the behavioural and neurobiological basis of cognitive processes, the role of the environment in the development of behaviour. Tinbergen's four questions; ultimate and proximate behaviour. The approaches of behavioural ecology and ethology. Relationship of behaviour, evolution and ecology. Hypothesis testing in behavioural ecology: observation, experiment and phylogenetic comparative methods. The evolution of behaviour. Economic decisions of individuals. The principle of cost and profit. Optimality models. Group behaviour and types of animal societies. Introduction to the evolutionary game theory. Communication, ecology and evolution of signals. Sexual selection and sexual conflict, mating systems, alternative mating strategies. Reproductive strategies and life history. Human behavioural ecology.
5.	Cartography and Projections	Topics of the course: Fundamentals of cartography. Geographical coordinate system, scale. Compass usage. Route planning in hiking. Basic definitions in projections: Plane, cone, cylinder projection. Imaginary projections, distortions. Map elements: relief. Planimetry, names. Generalization, representation of settlements. Thematic mapping methods. Map keys and legends. Map history in the world and Hungary. An introduction to modern mapping.
6.	Physical Geography I.	Students know the complexity of the geosphere, its physical geography elements and regularities. They know the theory of evolution, structure and construction of the Earth. Geophysical characteristics of the Earth: causes of earthquakes, earth magnetism. An overview of the geomorphology-related aspects of plate tectonics and volcanism. Presentation of geomorphological processes. Geography of water. Physical and chemical properties of water. Water resources of the Earth and the origin of water resources. Circulation of water, water balance.
7.	Basics of Spatial Development	The aim of the course is to present the basics of regional policy. Students learn about the history, purpose, methods and tools of settlement development. Students become acquainted with fundamental relationships and the structure of European and national spatial development. Important concepts will be clarified (spatial categories, etc.).

Programme: Environmental Sciences (Fall)		
No.	Course name	Course description
8.	International tourism geography	Students get acquainted with the economic and tourism geography of the most frequented regions of Europe and other continents. Customs, culture and tourist attractions of the countries and regions are presented.
9.	Geopolitics and globalization	The course aims to introduce the development, characteristics, relationships and geographical aspects of global economic and political systems. The course covers the following topics: Interpretations of globalization (Internationalization, Liberalization, Homogenization, Americanization, Scientific definitions, Shrinking world). Globalization pros and cons. International organizations (IMF, WB, WTO). Global economy. Anti-globalization movements. Globalization myths.

Programme: Environmental Sciences (Spring)				
No.	Course name	Course code	Credit	Semester
10.	Comparative Animal Physiology	BBI2106	5	Spring
11.	Biodiversity Monitoring	BKT2213	4	Spring
12.	Environment and Sustainability	BAI0050	4	Spring
13.	Genetics I.	BBI2116	4	Spring
14.	Human Biology	BBI2115	5	Spring
15.	Environmental Earth Science I.	BKT2210	6	Spring
16.	Geographical Zonality	BFD1214	3	Spring
17.	Historical Geography of the World Economy	BFD2261	4	Spring
18.	Renewable Energy Resources	CB3302	2	Spring

Programme: Environmental Sciences (Spring)		
No.	Course name	Course description
10.	Comparative Animal Physiology	The main purpose of the course on the basis on the materials of the previously studied biological courses (primarily Zoology, Animal Science, Biological Basics) is that students know the functions of the tissues, organs and organ systems of animals and humans. History of physiology. Physical and biochemical basics of physiology. General properties of signalling mechanisms. Grouping of molecular signals and their transmitters to communicate between cells. Homeostasis. Fluid compartments, membrane potential. Action potential. The physiology of muscular system. The function of the cardiovascular system, the respiratory system and the secretion system. Digestive system, metabolism and energy. Neuro-endocrine regulation. Bioluminescence. Physiology of reproduction and development. Sense and moving. Nervous system integration: drive, motivation, biological rhythms, sleep. Higher nervous system processes. Basics of psychophysiology. Basic immunobiological knowledge. Skills to be trained: Body fluids: haemolymph and blood tests. Examination of the cardiovascular system: in situ and isolated heart tests. Examination of the circulatory system in invertebrate and vertebrate animals. The measure of blood pressure in bloodless and bloody ways. Electrical phenomena accompanying life processes, detection (e.g. ECG, EEG). Analysing the respiratory processes in invertebrate and vertebrate animals. Investigating the physiological processes of nutrition and digestion by animal experiments. Investigation of the role of various body fluids in digestion (enzymatic tests). Examining the function of the excretory organs of animals and humans. Examining the physical and chemical properties of the urine. Investigation of neuroendocrine functions. Examination of motion and peripheral nervous system. Detection intensity tests. The physiology of the central nervous system. The essence and mechanisms of biological regulation (heart rate, blood pressure, body temperature and blood sugar regulation).
11.	Biodiversity Monitoring	Students are able to develop and manage biodiversity monitoring work. Data collection with the contribution of voluntary participants. Statistical processes for analysing survey data. Basic skill for developing and using computerised databases. Usage of aerial and satellite picture for the survey. Global, regional and local programmes. Results of monitoring programmes and their application.

Programme: Environmental Sciences (Spring)		
12.	Environment and Sustainability	The aim of the course is to show that the sustainable development is creating harmony between economy, ecology and society. Global citizen. Education for sustainability. The economy and sustainable development. Ecological footprint. Sustainable cities.
13.	Genetics I.	The goal of the course is to provide a better understanding of genetic concepts and phenomena by their practical demonstration. The introduction of fission yeast, as a genetic model system. Topics: Solution of problems in Mendelian genetics, an extension of Mendelian genetics and genetic mapping. Problem-solving in connection with the theoretically studied topics. Extension of the knowledge of the genetics of microorganisms: experiments with fission yeast model system (life cycle, determination of auxotrophy and mating-type, genetic recombination).
14.	Human Biology	The aim of the subject is to discuss comparative biology and characters of recent and extinct human variants. The structure of the human body, especially the anatomy of the tooth and skeleton. Active and passive organs of movement. The peculiarities and organization of prenatal and postnatal growth. The phenomena and causes of secular growth. The effect of the genetic background and environmental factors on growth and maturity. Anthropometry, characteristics and changes in the body composition and composition of the body. Body image, body shape, movement. Dermatoglyphics and its significance. Change in the physique during growth and development. Human genetics, chromosomal abnormalities. The basics, methods of analysis and significance of historical anthropology. The formation of hominid characteristics, the phases of human evolution. Human and its environment: the biodiversity of Homo sapiens. The emergence of geographic races and characterization of the main groups. The formation and taxonomy of the peoples of the Carpathian Basin. Objectives, tools and conditions of historical anthropology studies: The skeletal system and its metric features: craniometrics, measurements points and dimensions of the postcranial skeleton. Age at death estimation. Morphological sex determination. Determination of paleodemographic features. Analysis of living people: Classification of the examined features and the sampling. Body shape: estimation by using somatotyping: Methods for estimation of body composition: body composition estimation by instrumental technique, nutrition estimation based on anthropometric measurements. Examination of dermatoglyphs.

Programme: Environmental Sciences (Spring)		
15.	Environmental Earth Science I.	Students know the main characteristic features of soil, the morphological regions of Hungary, the formation of different soil types, water, air and thermal processes in the soil. They realize the characteristics of soil (structural, morphological, acidity, water processes), soil maps and determination of the mechanical composition of the soil. They can apply soil structure determination. They know precipitations and secondary formations in soils, pH tests, the examination of the soil water management properties, soil maps, soil degradation processes, and Hungary's Nature and Landscape. The Carpathian Basin. Formation of relief in Hungary.
16.	Geographical Zonality	Geographical zone system. Changes in landscape factors in geographical areas. Morphodynamic processes and climatic relationships. Students learn from constantly wet tropics to polar and sub-polar regions the present climatic conditions and their impact on the surface formation and earlier forms in detail. Peculiarities of the vertical zone.
17.	Historical Geography of the World Economy	The course aims to introduce the main stages of the development of the world economy from the Stone Age up to the present day. The course covers the following topics: Interpretations and evolution of historical geography. General characteristics of economic development and their determining factors. Evolution of humankind and its spread across the globe and Europe. The process of transition from a nomadic lifestyle to agricultural production. Economic achievements and limits of ancient civilization. Economic and social development in medieval Europe. Economic and social foundations of modern Europe. The period of merchant capitalism and proto-industrialization. Prerequisites and concomitants of industrialization, and its social, economic, political, and cultural consequences. Main factors of economic development in the 19th century. Consequences of the two world wars and the 1929-33 crisis on the world economy in the 20th century.
18.	Renewable Energy Resources	During the course, students learn about the various renewable energy resources and their potential use. The course syllabus covers the potential assessment and basic economic calculations are also performed.

GENERAL AND PROFESSIONAL FOREIGN LANGUAGE COURSES

(OPTIONAL)

At the University of Nyíregyháza, students are offered optional foreign language courses to catch up and to prepare for language proficiency exams. General language courses are subdivided into levels, whereas the requisite for a professional language training is level B2. A computer-assisted language assessment test precedes applying for a course. Every course offered is accompanied by an e-learning material. This ensures that besides the regular classes the courses can also be taken in distance learning. General language courses are in English, German, French, Russian and Ukrainian; professional language training is in English, German, French and Russian.

General and Professional Foreign Language Courses (Optional) (Fall/Spring)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
1.	Foreign Language I. (English, German, French, Russian, Ukrainian)	CI3001	2	Fall/Spring
2.	Foreign Language II. (English, German, French, Russian, Ukrainian)	CI3002	2	Fall/Spring
3.	Foreign Language III. (English, German, French, Russian, Ukrainian)	CI3003	2	Fall/Spring
4.	Foreign Language IV. (English, German, French, Russian, Ukrainian)	CI3004	2	Fall/Spring
5.	Foreign Language V. (English, German, French, Russian, Ukrainian)	CI3005	2	Fall/Spring
6.	Foreign Language VI. (English, German, French, Russian, Ukrainian)	CI3006	2	Fall/Spring
7.	Foreign Language VII. (English, German, French, Russian, Ukrainian)	CI3007	2	Fall/Spring
8.	English/Russian for Special Purposes: Commerce and Trade	CI3008	2	Fall/Spring
9.	Technical English/German	CI3009	2	Fall/Spring
10.	Tourism and Catering (English, German)	CI3011	2	Fall/Spring
11.	English for Information Technology	CI3012	2	Fall/Spring
12.	Business Communication I. (English, German, French, Russian)	CI3013	2	Fall/Spring
13.	Business Communication II. (English, German, French, Russian)	CI3014	2	Fall/Spring

General and Professional Foreign Language Courses (Optional) (Fall/Spring)		
No.	Course name	Course description
1.	Foreign Language I. (English, German, French, Russian, Ukrainian)	The course starts at CEFR level A1 (beginner) and its goal is to systematize and automate the language knowledge acquired formerly. The outcome to level A2/1. Listening: Understanding short, simple and slowly articulated information connected with the Listener's everyday life. Reading: Understanding simple texts in colloquial language or in topics related to their studies. Writing: Writing informal letters (intentions, essays about simple events, etc.) Speaking: Reacting and giving opinion spontaneously using simple sentences in familiar situations and conversations in topics of personal interests.
2.	Foreign Language II. (English, German, French, Russian, Ukrainian)	The course starts at CEFR level A2/1 and A2/2 and it aims at improving competence acquired previously. The outcome to level B1/1. Listening: Understanding short, simple speech in topics related to familiar matters provided speech is clearly articulated. Understanding the main message of speech conveyed in the media. Reading: Understanding simple, colloquial articles or texts on subjects related to his/her studies. Writing: Informal letters, reports on subjects related to his/her studies (impressions, feelings, delivering information). Speaking: Reacting and expressing opinion spontaneously in familiar situations, and in topics related to his/her field of interest using simple sentences with subtlety relevant to level.

General and Professional Foreign Language Courses (Optional) (Fall/Spring)		
3.	Foreign Language III. (English, German, French, Russian, Ukrainian)	The course starts at CEFR level B1/1 and B1/2 and it aims at improving competence acquired previously. The outcome to level B2/1. Listening: Understanding simple colloquial speech or information on subjects related to his/her studies provided speech is clearly articulated. Understanding the main points of radio or TV news bulletins and simpler recorded material about familiar subjects delivered relatively slowly and clearly. Understanding the meaning of unfamiliar words from context. Reading: Understanding simple, colloquial articles or texts on subjects related to his/her studies. Writing: Informal letters, reports on subjects related to his/ her studies (justification, explanation, impressions, feelings, delivering information). Speaking: Reacting and expressing an opinion spontaneously in familiar situations and in topics related to his/her field of interest using simple sentences with subtlety relevant to level.
4.	Foreign Language IV. (English, German, French, Russian, Ukrainian)	The course starts at CEFR level B2/1 and it aims at improving competence acquired previously. The outcome to level B2/2. Listening: Understanding longer colloquial speech in topics of this level or information on subjects related to his/her studies. Understanding the information content of the majority of recorded or broadcast audio material delivered in clear standard speech. Understanding the meaning of unfamiliar words from context. Reading: Giving a summary of content after reading colloquial articles or texts on subjects related to his/her studies. Writing: Can write clear, detailed texts on a variety of subjects related to his/her field of interest. Writing informal letters, and reports on subjects related to his/ her studies (justification, explanation, impressions, feelings, delivering information). Speaking: Reacting and expressing opinion spontaneously in familiar situations and in topics related to his/her field of interest using complex sentences with subtlety relevant to level.

General and Professional Foreign Language Courses (Optional) (Fall/Spring)		
5.	Foreign Language V. (English, German, French, Russian, Ukrainian)	The course starts at CEFR level B2/2 and it aims at improving competence acquired previously. The outcome to level B2/4.Listening: Understanding longer interviews, lectures, longer colloquial speech or information on subjects related to his/her studies. Understanding the information content of the majority of recorded or broadcast audio material delivered in standard speech and summarizing it without significant errors concerning content. Reading: Giving a summary of content after reading colloquial articles or texts on subjects related to his/her studies. Writing: Can write clear, detailed texts on a range of familiar subjects. Writing informal letters, and reports on subjects related to his/ her studies (justification, explanation, impressions, feelings, delivering information). Speaking: Reacting and expressing opinion spontaneously in different situations as well as in topics beyond his/her field of interest using complex sentences with subtlety relevant to level.
6.	Foreign Language VI. (English, German, French, Russian, Ukrainian)	The course starts at CEFR level B2/4 and it aims at improving competence acquired previously. The outcome to level B2/6. Listening: Can understand speech on concrete and abstract topics and news bulletins spoken at normal speed and summarize it without significant errors. Reading: Giving a summary of content after reading colloquial articles or texts on subjects related to his/her studies and understanding literary works. Writing: Can write an essay or report which develops an argument, giving reasons in support of or against a particular point of view and explaining the advantages and disadvantages of various options. Speaking: Reacting and expressing opinion spontaneously in conversations with native speakers in different situations as well as in topics beyond his/her field of interest using complex sentences with subtlety relevant to level.

General and Professional Foreign Language Courses (Optional) (Fall/Spring)		
7.	Foreign Language VII. (English, German, French, Russian, Ukrainian)	The course starts at CEFR level B2/6 and it aims at improving competence acquired previously. The outcome to language exam level B2. Listening: Can understand speech on concrete and abstract topics and news bulletins spoken at normal speed and summarize it without errors. Reading: Can give a summary of content after reading colloquial articles or texts on subjects related to his/her studies. Can understand specialised articles or literary works provided he/she can use a dictionary. Writing: Can write an essay or report which develops an argument, giving reasons in support of or against a particular point of view and explaining the advantages and disadvantages of various options as required at language exam level B2. Speaking: Reacting and expressing opinion spontaneously in conversations with native speakers in different situations as well as in topics beyond his/her field of interest using complex sentences with subtlety relevant to level. Competency in topics specific to language exam level B2.
8.	English/Russian for Special Purposes: Commerce and Trade	Students become familiar with the English and Russian language of trade communication, with the peculiarities of its cultural background and its differences from the Hungarian language.
9.	Technical English/German	Students know the fundamentals of the English or German terminology related to internal combustion engines and automotive technology. They can communicate about related topics in these languages.
10	Tourism and Catering (English, German)	Students become familiar with the foreign-language vocabulary of tourism and the hotel and restaurant industry. They know the vocabulary of business communication both orally and in writing.

General and Professional Foreign Language Courses (Optional) (Fall/Spring)		
11.	English for Information Technology	Students become familiar with basic functions of information technology and the special language and vocabulary of this field (level B2). Students acquire language skills based on which they can read, understand and translate specialised articles and literature without a dictionary. They can understand and use programs and instructions in English. Students are able to participate in an English-language job interview which should boost their chances to find employment.
12.	Business Communication I. (English, German, French, Russian)	Situations and case studies covering the following topics: Writing a CV and cover letter in the foreign language, job interviews, the legal and administrative aspects of employment, types of enterprises, company structures.
13.	Business Communication II. (English, German, French, Russian)	The linguistic and cultural aspects of typical situations in the office and the conduct of business: information gathering, forms of oral and written communication, telephone conversations, planning and organisation, problem-solving, negotiations and discussions, presentations.

MECHANICAL ENGINEERING IN THE AGRICULTURE AND FOOD INDUSTRY

Professionals are able to perform mechanical engineering tasks in various sectors of the national economy, especially in the agricultural and food production and service sectors. As a contractor they are able to carry out production, development and advisory services, to manage machine operation and economic processes related to agriculture and manufacturing. Within the scope, the running of machines specialization is currently available.

Programme: Mechanical Engineering in the Agriculture and Food Industry (Fall)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
1.	Mechanics I.	BAI0140	7	Fall
2.	Engineering Informatics	BAI0143	4	Fall
3.	Basics of Food Processing	BAI0138	5	Fall
4.	Knowledge of Engineering Logistics	BMG2207	4	Fall
5.	Electronics and Electrotechnics	BMG1106	4	Fall
6.	Energy Management	BAI0095	3	Fall

Programme: Mechanical Engineering in the Agriculture and Food Industry (Fall)		
No.	Course name	Course description
1.	Mechanics I.	Objective: By passing the course students know basics of statics of mass point, rigid body, are able to understand problems in statics, describe stress plots of rigid bars, perform verifying and dimensioning in case of simple stress states. Concepts of mechanical models, branches of mechanics. Statics of mass point. Force, force systems in space, plane and lineside, reducing force systems. Statics of the rigid body. Equilibrium force systems, Definitions and classification of boundary conditions. Calculation of reaction forces in case of plane problems and spatial trusses. Reducing a parallel force system, weight. Load and stress, stress functions, stress plots. Friction, Coulomb-law of friction, equilibrium in presence of friction. Stability of equilibrium. Statics of deformable body, displacement, deformation, stress. Verifying and dimensioning. The second moment of area, transformations of 2nd moments of area, Steiner's theorem, additivity, eigenvalue problem, Eigensystem, inertial radius. Simple stress states of bars, push and pull, regular bending, torsion of bars with circle and ring cross section, pressed thin bars.
2.	Engineering Informatics	Understand the design of computers and IT systems and their major processes. The hardware structure and software pyramid elements. Network connections for computers and the basics of their operation. Implementing general programming basics, basic algorithms and control structures in different programming languages. Hardware (hardware, scanner, plotter, 3D Meter, Prototype printer, etc.) related to engineering (design, manufacture, control) and their software. Knowledge and application of general statistical programs (SPSS, MathLab). The process and the steps of the project design. Basic concepts of information theory and system theory. The concept and types of information systems. Corporate Management Information Systems (ERP). Management Information System (CIS). Electronic commerce, electronic business management systems. Logistics Systems.

Programme: Mechanical Engineering in the Agriculture and Food Industry (Fall)		
No.	Course name	Course description
3.	Basics of Food Processing	Objectives (Purpose of mastering the subject): Acquiring theoretical knowledge and practical skills in the field of processing and preserving of agricultural products and crops, at small-and large-scale. The students get to know the most important preservation and storage operations and technologies, machines and equipment of the food industry. Subject programme: History, tasks, economic importance and branches of food processing industry. Raw materials of plant and animal origin. Auxiliary materials and food additives. Methods and preservation procedures of the food industry. Preparatory, character forming, preservation and final operations in the canning industry, machinery and equipment. Preservation by heat transfer (preheating, dragging, pre-cooking, pasteurization, sterilization, aseptic preservation). Production technology for canned fruits and vegetables. Production technologies for baby foods. Production technologies for canned meat and ready meals. Food preservation with chilling (cooling, freezing). Cooling storage (crop storage) technologies. Quick freezing technologies. Preservation with drying. Technologies of fruit and vegetable drying. Development of a given food processing technology in a project and group work. Visiting of food processing factories.

Programme: Mechanical Engineering in the Agriculture and Food Industry (Fall)		
No.	Course name	Course description
4.	Knowledge of Engineering Logistics	Goal: The main aim of the subject is that the students of agricultural and food industry mechanical engineering get acquainted with bases of modern logistics management in the matter of transportation, loading and storage processes. In addition, the students get insight into the planning of main logistic equipment. Subject programme: The concept of logistics. The logistics of a supply chain. RST processes. The features of loose substances and packets. The construction of fundamental engineering elements of continuous material handling machines, aspects of calibration and selection (belt conveyor, elevator, chain conveyor, scraper conveyor, screw conveyor, roller conveyor, tram-rail conveyor and vibrating element material flows). The calculation of continuous material transport equipment's performance and control of the function of the system.
5.	Electronics and Electrotechnics	Objective: After acquiring the requirements of the course, the students are familiar with the electrical circuits which are the basis for the electrical systems of modern agricultural machinery and equipment. The laws of electrostatics. Capacitors. DC circuits. AC circuits. Impedance, electrical power, power factor correction. Three-phase circuits. Star-Delta connections. The magnetic field. Magnetic forces, magnetic B-field, magnetic H-field, magnetic flux. Changing the magnetic flux, electromagnetic induction. Faraday's law. Single phase and three-phase transformers. Electrical machines. Three-phase asynchronous motors. DC motors. Stepping motors. P and N type semiconductors. PN junction. Diodes, transistors, thyristors and triacs. Rectifiers. Bipolar and field effects transistors. Basic connections of transistors. Input-output characteristics, load line and operating point. Amplifiers. Negative feedback in amplifiers and its effects. Integrated circuits. Operational amplifiers. Basic circuits, inverting and non-inverting amplifiers.

Programme: Mechanical Engineering in the Agriculture and Food Industry (Fall)

No.	Course name	Course description
6.	Energy Management	Course Goal: The students are acquainted with the subject of the energy management elementary theory and structures. They are able to do the different energy systems and energy management tasks of a plant. The education course is intended to provide a basic knowledge of architecture, which helps when assessing an investment in the scientific terms and solution orientation modes. It provides knowledge of the building procedure and documentation in the field of investments. Students become familiar with the plumbing equipment operating principles. Subject programme: Energy sources, power plants. Fossil fuels. Burning theory and its relationship with the environmental protection. Heat generation centres and their operation. District heating systems. Gas supply network. Agricultural energetics. Analysing the biobriquette and biopellet production process, and their equipment. Opportunities and raw materials for biogas production. Biofuels productions. Opportunities for waste heat utilization in agriculture. Solar, water, wind and geothermal energy utilization. Buildings' heating and cooling technologies and systems. Energy label for buildings.

Programme: Mechanical Engineering in the Agriculture and Food Industry (Spring)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
7.	Mechanics II.	BAI0141	7	Spring
8.	Basics of CAD	BAI0075	3	Spring
9.	Precision Agriculture	BAI0139	4	Spring
10.	Machine Elements	BMG2208	4	Spring
11.	Basics of FEM	BAI0146	5	Spring
12.	Operation of Agricultural Machines	BMG2101	5	Spring

Programme: Mechanical Engineering in the Agriculture and Food Industry (Spring)		
No.	Course name	Course description
7.	Mechanics II.	Objective: By passing the course the student knows principles of statics of flexible body, dynamics of mass point and rigid body, is able to perform verifying and dimensioning in case of complex stress states of bars, describe the general motion of the mass point, and special motions of a rigid body. Bars with general stress state. Skew bending, pull-push and bending, eccentric pull-push of bars. Dimensioning for stress peak in case of general stress state, stress theories, Mohr's theory, HMH theory. Bending and shear, pull bend and torsion. Work-energy principles in statics, Betti's theorem, Castigliano's theorem. Kinematics of the mass point: motion law, displacement, velocity, acceleration. Kinematics of special motions. Uniform motion, accelerating motion, round motion, harmonic vibration. Kinematics of a rigid body, instant motions, finite motions. relative motion. Principles of dynamics. Dynamics of the mass point: equation of motion, linear momentum, kinetic energy, work, potential energy, conservation of mechanical energy. Dynamics of a rigid body: centroid, linear and angular momentum, their conservation, conservation of mechanical energy. Moment of inertia. translation and rotation of the rigid body. Pendulum. Top.

Programme: Mechanical Engineering in the Agriculture and Food Industry (Spring)		
8.	Basics of CAD	Basic concepts related to CAD systems. The architecture of CAD systems, hardware and software components. Computer Drawing Systems. Development of computer product design. Integrated Design Systems CAD / CAM / CAE. The process of product development. Conceptual design in CAD environment. Top-down design. Creating 2D profiles. Sketching. Create and modify basic elements. Geometric constraints. Making technical drawings (projections, engravings, scaling). Geometric modelling based on algebraicity. Create, modify, store wireframes, surface and body models. Creating and modifying extruded rotation and translational bodies. Part modelling. Make compositions. Standard items that can be obtained from the Content centre. Manufacturers' catalogues and their use on the Internet. Illustrating models, visibility algorithms. Illumination, shading, photorealistic rendering. Work in a virtual reality environment. CAD / CAE analytical procedures. Finite element method. Product Lifecycle.
9.	Precision Agriculture	Objectives: Acquiring theoretical knowledge and practical skills in the field of precision agriculture. The students get to know the most important systems, strategies, machines and IT background. Subject programme: History, tasks and economical importance of precision agriculture. Crop production technology. Basic IT knowledge of precision agriculture. Geographical information system. Global Positioning System - GPS systems. Data collection (from analysis of soils and residual nitrogen, and information on previous crops). Sensors and monitors of precision agriculture. Precision plant protection. Precision nutrient management. Precision water management. Tractors and agricultural machines management. Yield mapping and harvesting systems.

Programme: Mechanical Engineering in the Agriculture and Food Industry (Spring)		
10.	Machine Elements	Objective: Developing the technical attitude of students. Develop skills in the selection and dimensioning of more frequent machine parts and machine structures. Developing standardization knowledge. Design, dimensioning and drawing of complex machines. Course content: The tasks of machine elements. Screw connections. Mechanics of screws. Wedge and latch bonds. Nose and bolt attachments. Shrink. Rivet Joints. Welded joints. Axes. Bearings. Rolling Bearings. Clutches. Flat-leather belt drives. V-belt drive. Friction drive. Chain drives. Classification of gears. Concealment, switching line, switch number. Geometrical dimensioning of spur gears. Submersion and ways of avoiding it: compensated and general toothing. Relative slip. Forces in toothed drives. Strength grading of toothed wheels. Internal gears with cylindrical gears. Spur gear drives. Front screws. Bevel gear drives. Worm gears.
11.	Basics of FEM	Objective: By passing the course the student knows principles of finite element analysis and simple computational applications. Programme of discipline: Brief history of finite element method. Principles of variational calculus. variational principles of mechanics. Principles of numerical methods. Stiffness equation of elements and a system. Types of finite elements. Computational applications.

Programme: Mechanical Engineering in the Agriculture and Food Industry (Spring)

12.	Operation of Agricultural Machines	Goal: The aim of the course is to enable students to master the theoretical background and practical questions of the operation of agricultural power machines and implements, their applicability in modern agricultural technologies. Subject programme: Systematization of agricultural machines. The technical, energetic and economic aspects of the compilation of machine groups. Operational power losses of machines, methods for reduces it. Tractor requirements, tractor categories. The traction and operational characteristic curves of tractors. Consumption of power machines. The technical criterions of machine group's compilation. Movement of field-machine groups. The centre of gravity and stability of agricultural machines. Mechanization plans. Functional machine systems: operation of tillage machines, fertilization machines, seeders and planters, plant protection machines. Determining the operating and economic indicators of agricultural machinery. Steps of mechanization plan linked to production technology. Sectoral machines system: operation of machines system of cereal grain production, maize production, potato production, sugar beet production, roughage production. Energy management issues, renewable energy sources. Technological analysis of the service of machine systems.


MADE IN UK

MUSIC

The University of Nyíregyháza has 50 years of heritage in the field of school music teacher training. Within the training based on the Kodály Concept music specialists as well as school music teachers capable of managing school choral activities with advanced musical and pedagogical knowledge will graduate. Furthermore, at the University of Nyíregyháza, you can graduate as Teacher of Folk Music. Accordingly, you have the opportunity to learn to play folk musical instruments. The available courses in music compiled for Erasmus students at the University of Nyíregyháza constitute a cross-section of the music training of the institution and they emphasize the duality of tradition and modernisation.

Programme: Music (Fall)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
1.	Music skill-training 1. 3. 5. (it depends on the level of the course)	BZE1103 BZE1113 BZE1123	3	Fall
2.	Conducting practice 1. 3.	BZE1105 BZE1115	3	Fall
3.	Obligatory piano 1.	BZE1106	2	Fall
4.	Voice Training 1.	BZE1107	2	Fall
5.	Keyboard-skills: Score Reading and Transposition 1.	ENO1067	1	Fall
6.	Folk Instrument 1.	NZO1011	3	Fall
7.	Musical Computer Science 1.	BZE2191	4	Fall
8.	LSP: Music Pedagogy (English) E-learning	CI3010	2	Fall
9.	Marketing	BAI0057	5	Fall
10.	European Trends in Pedagogy (English, German, French)	BAI0058	4	Fall
11.	International Models of Integration and Inclusiveness (English, German, French)	BAI0059	4	Fall

Programme: Music (Fall)		
No.	Course name	Course description
1.	Music skill-training 1. 3. 5. (it depends on the level of the course)	Knowledge: Students have basic knowledge of practical activities in musical culture through their studies in music skill development. Skills: They are able to apply their knowledge in music theory according to expectations in institutional contexts. Through their basic knowledge of practical activities in musical culture acquired through their studies in music skill development, they are able to perform high-quality work. Aims: Consolidating, expanding and practical application of music theory and music history knowledge. Developing musical literacy and listening skills through different practical exercises. Singing in monophony and polyphony, reading scores, dictation, memorising, transposing, noting, listening practice, music and piano exercises. BZE1103 Music theory in practice. The pedagogical works of Zoltán Kodály. BZE1113 Music theory in practice, chiefly relying on sources of Baroque music. BZE1123 Music theory in practice, chiefly relying on sources of the music of Romanticism.
2.	Conducting practice 1. 3.	BZE1105 Making conducting moves appropriate for leading music, through basic conducting practice. Knowledge: Students know the basic technical skills of conducting choirs; they understand the conducting technique aspects of starting and finishing singing. Skills: They are able to master the proper postures of body, arm and hand. They skilfully apply the mechanism of stroke, have a proper knowledge in basic beat types. They are able to give a signal to the main beat part of compositions of different character and tempo; to finish sounds with circular movement or stroke. They are able to give an initial note. BZE1115 Further development of conducting technique, making it suitable for experiential interpretation of various musical processes. Mastering and the further development the tools necessary for guiding tempo, character, dynamics, and formation. Generic and stylistic knowledge and their application in conducting connected to different periods of music history. Samples from Baroque and contemporary choir works; the choral works of Zoltán Kodály, Béla Bartók and Lajos Bárdos. Knowledge: Students know the technical solutions of parlando and rubato style performance. They understand the structure of five and six beats. Skills: They are able to conduct compositions containing units of alternating rhythm, in parlando and rubato style performance, periods with different tempo and dynamics. They are able to apply the change of tempo and dynamics without a transition in conduction. They are able to conduct in five and six beats.

Programme: Music (Fall)		
No.	Course name	Course description
3.	Obligatory piano 1.	Mastering a level of practical skills on piano with which the students are able to participate in musical life, through autonomy and responsible attitude becomes able to participate in it actively and help musical ensembles, lead them and create musical productions. The acquired instrumental skills complement the other subject in their studies, work in cultural life, recognising musical talent and fostering it. Practical skills on the piano, adequate knowledge of style and good interpretational capacity make the students able to transmit values of classical and modern music professionally and to shape the musical taste of their environment. Knowledge: Students possess basic professional knowledge of the characteristic of distinct periods in the history of music, their considerations of instrumental interpretation, they are aware of the problems of the performance of earlier compositions on modern instruments and different acoustic environments. Skills: Students are able to use their instrumental skills up-to-date in a musical environment in their sphere of responsibility. They are able to plan tasteful and stylish musical programmes, able to deal with the technical and human issues of the performance with routine, with consideration of ethical norms.
4.	Voice Training 1.	Proper singing technique. Basic physiological and physical knowledge pertaining to speech and proper articulation of vocals. Proper posture, breathing and singing technique. Conscious application of starting sounds. Expanding ambitus, increasing breath capacity. Knowledge: Students are aware of the ethical norms and copyright regulations in relation to all activities of the field of music culture, especially that of performance. Skills: They use musical education to preserve and foster bodily and mental health and the formation of a harmonious personality. They are able to form and strengthen a health-centred view through the transmission of music culture. They are able to integrate the three main skill fields of music education (reception, interpretation, creation) in the process of learning about voice articulation. They are apt to recognise and manage musical talent. They are able to become an open, creative person, with European culture and preserving and interpreting Hungarian traditions.

Programme: Music (Fall)		
No.	Course name	Course description
5.	Keyboard-skills: Score Reading and Transposition 1.	Interpreting vocal and instrumental works of different periods in music history. The student is expected to be able to transmit their knowledge, both theoretical and practical, in school and other fields of music education. They are expected to use their knowledge in the entirety of music education and in the field of the theory and practice of music pedagogy. Interpreting multi-line and multi-key sheet music and scores. Reading transposition instruments. The different periods in the styles of notation. Types of scores. Orchestration.
6.	Folk Instrument 1.	*Zither*: The course wishes to provide advanced training in the knowledge of style, playing technique and the ethnographic and theoretical background related to the instrument. The main topic areas include the middle-sized and smaller regions in which the study of folk music documented the authentic and traditional use of the zither. Students will be enabled to transmit – based on their qualities as performers – the values of folk music and folk culture and to form pupils' musical tastes. The course wishes to form a complex approach with whose aid students will be able to use extramural cultural activities (folk dance clubs, festivals, concerts, creative camps, museum pedagogy programmes) to supplement their university training. *Folk flute*: A goal of the course is to provide a profound knowledge of distinct types of recorder, to present the history of the instrument family, and the characteristics of the recorder playing of different dialect areas. The course wishes to form a complex approach with whose aid students will be able to use realize the correspondences between instrumental music and singing. This is enhanced by a close co-operation with the subject of Folk Singing. The course: improves students' instrumental play, their knowledge of music, technique and style, continuously expands the students' repertoire, draws attention to the role of instrumental players in society, develops students' knowledge of ethnography, familiarizes students with the pedagogical role of melodies and melodic turns in institutional folk music education.
7.	Musical Computer Science 1.	A detailed knowledge and use of software enhancing musical hearing and score editing software. Getting to know and using basic skills in connection with files (opening, saving, preparing templates, printing etc.), and in connection with data content (such as storing data, compaction, transposition, cutting, joining, exporting etc.). Knowledge: Students have basic knowledge of IT devices pertaining to the subject. Skills: They are able to integrate the acquired knowledge into a digital environment. They are able to use new IT devices in the planning and execution stage of application.

Programme: Music (Fall)		
No.	Course name	Course description
8.	LSP: Music Pedagogy (English) E-learning	The topic areas of the course - which is an integral part of the programme of music culture and music pedagogy besides other courses conforming to international demands - has a twofold aim: to develop language competences in a complex way and help master technical terminology. Students can gain expertise in the topics either with individual or group work. The primary aim of the course is the practice of English with a focus on the relevant themes. Necessary preliminary knowledge: basic knowledge of music. Knowledge: Students have knowledge of basic music and music theory. Skills: They are able to process B1 level English texts. They are able to characterise the musical material of compositions of different styles and genres with the help of scores, audio and video files. They are able to define music concepts and use them. They are able to study autonomously.
9.	Marketing	The course aims to raise students' awareness of the special features of the consciously created marketing system of business organizations. The importance of market orientation and consumer-oriented thinking. Understanding the economic significance of marketing. Practical application of market research methods. Parts of the marketing elements, (7P Product-Price-Place-Promotion-People-Physical evidence-Processing). Macro -and microenvironment trends, market segmentation and positioning. Consumer behaviour, and market research methods and their application. (Data collection and analysis). The characteristics of services, the HIPI principle. Knowledge: Students are able to organize and manage market activities of enterprises. They can also determine the information requirements of marketing decisions, make preparatory proposals and make decisions. Ability: Students know the elements of the marketing system of businesses, are able to design and implement a marketing strategy individually and are able to cooperate with representatives of other fields. They are also capable of examining consumer habits and consumer satisfaction.
10.	European Trends in Pedagogy (English, German, French)	Students know the English, German or French terminology related to European education trends. They are able to study the special literature in these fields as well as express themselves both orally and in writing. Knowledge: Students know the English, German or French terminology of European trends of pedagogy as well as that of the theoretical background of new educational methods and their practice. Ability: Students are able to understand and study foreign-language articles related to European education trends. They can communicate about this field and are able to study special literature.

Programme: Music (Fall)		
No.	Course name	Course description
11.	International Models of Integration and Inclusiveness (English, German, French)	Students become familiar with the foreign methods and European models of integration and inclusion at school level by reading and studying authentic sources in the foreign language. Knowledge: Students acquire the vocabulary of the field of study at the intermediate level are well informed of the sources on the theory and practice of inclusion available in the printed and digital format. Ability: Students understand the main ideas of technical texts in the special field, are able to study and evaluate sources and obtain information independently.

Programme: Music (Spring)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
12.	Music skill-training 2. 4. 6. (it depends on the level of the course)	BZE1203 BZE1213 BZE1223	3	Spring
13.	Conducting practice 2. 4.	BZE1205 BZE1215	3	Spring
14.	Choir conducting 2.	BZE1225	3	Spring
15.	Obligatory piano 2.	BZE1206	2	Spring
16.	Voice Training 2.	BZE1207	2	Spring
17.	Keyboard-skills: Score Reading and Transposition 2.	ENO1068	1	Spring
18.	Folk Instrument 2.	NZO1012	3	Spring
19.	Dance-House	NZO1064	1	Spring
20.	Musical Computer Science 2.	BZE2292	4	Spring
21.	LSP: Music Pedagogy (English) E-learning	CI3010	2	Spring
22.	English for Information Technology	CI3012	2	Spring
23.	Environment and Sustainability	BAI0050	4	Spring

Programme: Music (Spring)		
No.	**Course name**	**Course description**
12.	Music skill-training 2. 4. 6. (it depends on the level of the course)	Knowledge: Students have basic knowledge of practical activities in musical culture through their studies in music skill development. Skills: They are able to apply their knowledge in music theory according to expectations in institutional contexts. Through their basic knowledge of practical activities in musical culture acquired through their studies in music skill development, they are able to perform high-quality work. Aims: Consolidating, expanding and practical application of music theory and music history knowledge. Developing musical literacy and listening skills through different practical exercises. Singing in monophony and polyphony, reading scores, dictation, memorising, transposing, noting, listening practice, music and piano exercises. BZE1203 Music theory in practice, chiefly relying on sources of Gregorian and Renaissance polyphony. BZE1213 Music theory in practice, chiefly relying on sources of Vienna Classicism. BZE1223 Music theory in practice, chiefly relying on sources of late Romanticism and the 20th century.
13.	Conducting practice 2. 4.	BZE1205 Mastering the tools necessary for guiding tempo, character, dynamics, and formation. Generic and stylistic knowledge and their application in conducting connected to different periods of music history. Conducting homophonic madrigals, villanellas, ballettos. Folk song adaptations in 2-3 voices. Knowledge: Students know the technical solutions of signalling at unstressed places in whole metre units and in non-whole metre units. They understand the conducting technical mechanism of metres in unified beats. Skills: They are able to give signals at unstressed places in whole metre units and in non-whole metre units. They are able to use movement systems of metres in unified beats, to signal expanded and sharp rhythms in conducting movements. They are able to use gradual tempo and dynamism shift in conducting. They are able to lead left hand on their own. BZE1215 Further development of conducting technique, making it suitable for experiential interpretation of various musical processes. Mastering and the further development the tools necessary for guiding tempo, character, dynamics, and formation. Generic and stylistic knowledge and their application in conducting connected to different periods of music history. Samples from Classical music. Contemporary Hungarian composers using more complex beat forms, their pieces written for poems of Hungarian and foreign poets. Knowledge: Students know the technical solutions of how to conduct fermata, general pause, tied notes and suspended notes. They understand the structure of asymmetric metres. Skills: They are able to conduct compositions containing fermata, general pause, tied notes and suspended notes. They are able to conduct works with instrumental accompaniment.

Programme: Music (Spring)		
14.	Choir conducting 2.	Improving conducting skills mastered previously and knowledge pertaining to them, their practical execution, developing skills of conduction on one's own. The methodology of teaching choral works. Conscious and artistic application of performing tasks of pieces composed in various periods. Knowledge: Students know the adaptation methods of vocal compositions; the singing technique that serves as a basis of choral singing, the repertoire which is the basis of choral singing. Skills: They are able to professionally execute conducting activities necessary for choir rehearsal and concerts. They are able to lead choir work and perform the inherent educational tasks. They develop flexibility, empathy and the sense of adaptation through communal music making. Through these forms, they are able to strengthen socialising processes and develop tolerance. They are able to professionally perform the practical tasks in the field of choir music.
15.	Obligatory piano 2.	Mastering a level of practical skills on piano with which the students are able to participate in musical life, through autonomy and responsible attitude becomes able to participate in it actively and help musical ensembles, lead them and create musical productions. The acquired instrumental skills complement the other subject in their studies, work in cultural life, recognising musical talent and fostering it. Practical skills on the piano, adequate knowledge of style and good interpretational capacity make the students able to transmit values of classical and modern music professionally and to shape the musical taste of their environment. Knowledge: Students possess basic professional knowledge of the characteristic of distinct periods in the history of music, their considerations of instrumental interpretation, they are aware of the problems of the performance of earlier compositions on modern instruments and different acoustic environments. Skills: Students are able to use their instrumental skills up-to-date in a musical environment in their sphere of responsibility. They are able to plan tasteful and stylish musical programmes, able to deal with the technical and human issues of the performance with routine, with consideration of ethical norms.

Programme: Music (Spring)		
16.	Voice Training 2.	Proper singing technique. Basic physiological and physical knowledge pertaining to speech and proper articulation of vocals. Proper posture, breathing and singing technique. Conscious application of starting sounds. Expanding ambitus, increasing breath capacity. Knowledge: Students are aware of the ethical norms and copyright regulations in relation to all activities of the field of music culture, especially that of performance. Skills: They use musical education to preserve and foster bodily and mental health and the formation of a harmonious personality. They are able to form and strengthen a health-centred view through the transmission of music culture. They are able to integrate the three main skill fields of music education (reception, interpretation, creation) in the process of learning about voice articulation. They are apt to recognise and manage musical talent. They are able to become an open, creative person, with European culture and preserving and interpreting Hungarian traditions.
17.	Keyboard-skills: Score Reading and Transposition 2.	Interpreting vocal and instrumental works of different periods in music history. The student is expected to be able to transmit their knowledge, both theoretical and practical, in school and other fields of music education. They are expected to use their knowledge in the entirety of music education and in the field of the theory and practice of music pedagogy. Interpreting multi-line and multi-key sheet music and scores. Reading transposition instruments. The different periods in the styles of notation. Types of scores. Orchestration.
18.	Folk Instrument 2.	*Zither*: The course wishes to provide advanced training in the knowledge of style, playing technique and the ethnographic and theoretical background related to the instrument. The main topic areas include the middle-sized and smaller regions in which the study of folk music documented the authentic and traditional use of the zither. Students will be enabled to transmit – based on their qualities as performers – the values of folk music and folk culture and to form pupils' musical tastes. The course wishes to form a complex approach with whose aid students will be able to use extramural cultural activities (folk dance clubs, festivals, concerts, creative camps, museum pedagogy programmes) to supplement their university training. *Folk flute*: A goal of the course is to provide a profound knowledge of distinct types of recorder, to present the history of the instrument family, and the characteristics of the recorder playing of different dialect areas. The course wishes to form a complex approach with whose aid students will be able to use realize the correspondences between instrumental music and singing. This is enhanced by a close co-operation with the subject of Folk Singing. The course: improves students' instrumental play, their knowledge of music, technique and style, continuously expands the students' repertoire, draws attention to the role of instrumental players in society, develops students' knowledge of ethnography, familiarizes students with the pedagogical role of melodies and melodic turns in institutional folk music education.

Programme: Music (Spring)		
19.	Dance-House	The course blends the theoretical and practical subjects. Its aim is to enable students to use their skills mastered in folk instrument classes. The course also provides an opportunity to use theoretical and practical knowledge mastered in Dance Folklore classes in function, and to experience the living connection of dance and music making. Due to its complexity, the subject develops several competences: co-operation, creativity, self-education, rigorousness. Making music to accompany dances, dance orders according to different dialects, mastering right dance tempos, achieving the harmony of dance and music.
20.	Musical Computer Science 2.	A detailed knowledge and use of music editing software. Further functions related to data content (joining different contents, transposition, cutting, relationships between different layers, importing, exporting, making content available for other programmes). Knowledge: Students have basic knowledge of IT devices pertaining to the subject. Skills: They are able to integrate the acquired knowledge into a digital environment. They are able to use new IT devices in the planning and execution stage of application.
21.	LSP: Music Pedagogy (English) E-learning	The topic areas of the course - which is an integral part of the programme of music culture and music pedagogy besides other courses conforming to international demands - has a twofold aim: to develop language competences in a complex way and help master technical terminology. Students can gain expertise in the topics either with individual or group work. The primary aim of the course is the practice of English with a focus on the relevant themes. Necessary preliminary knowledge: basic knowledge of music. Knowledge: Students have knowledge of basic music and music theory. Skills: They are able to process B1 level English texts. They are able to characterise the musical material of compositions of different styles and genres with the help of scores, audio and video files. They are able to define music concepts and use them. They are able to study autonomously.
22.	English for Information Technology	Students become familiar with basic functions of information technology and the special language and vocabulary of this field (level B2). Students acquire language skills based on which they can read, understand and translate specialised articles and literature without a dictionary. They can understand and use programmes and instructions in English. Students are able to participate in an English-language job interview which should boost their chances to find employment. Knowledge: Students know the foreign-language vocabulary of information technology.

Programme: Music (Spring)		
23.	Environment and Sustainability	Environmental problems cannot be solved in a sustainable way unless social and economic aspects are taken into consideration. This is one of the fundamental ideas of sustainability. This course should boost this attempt. Programme: Global environmental problems and their roots. Why sustainable development? Indicators of sustainable development. Ability: Students are capable of carrying out tasks related to the preparation and implementation of sustainability projects.

PEDAGOGY

At the University of Nyíregyháza, teacher training is available at the bachelor's and master's levels. The available bachelor's programmes: Infant and Early Childhood Educator, Kindergarten Teacher, Primary School Teacher.
The objective of the Infant and Early Childhood Educator training is to educate professionals who, by virtue of their knowledge, skills and attitudes, are able to look after children under the age of 3, as well as to educate them and help them grow up.

The objective of the Kindergarten Teacher training is to educate professionals who are capable of performing the tasks related to kindergarten education, raising children aged 3 to 7, practising pedagogy as a vocation.
The objective of Primary School Teacher training is to educate professionals who are qualified to perform tasks related to educating and teaching all compulsory subjects in the first four classes of the primary school, and teaching one chosen subject specialization in the first six classes of the primary school.

In all three courses, great emphasis is placed on inclusive education, and our selection of courses are tailored to that principle.

Programme: Pedagogy (Fall)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
1.	European Trends in Pedagogy (English, German, French)	BAI0058	4	Fall
2.	International Models of Integration and Inclusiveness (English, German, French)	BAI0059	4	Fall
3.	Inclusive Attitudes - Attitude shaping (English)	BCG2138	4	Fall
4.	Education of Children with Special Needs (English)	BCG2139	4	Fall
5.	Case Study	BCG2140	4	Fall
6.	Musical Computer Science 1.	BZE2191	4	Fall
7.	Sport games (tennis)	BSR2151	4	Fall
8.	Philosophy (German)	BAI0062	4	Fall

Programme: Pedagogy (Fall)		
No.	**Course name**	**Course description**
1.	European Trends in Pedagogy (English, German, French)	Students know the English, German or French terminology related to European education trends. They are able to study the special literature in these fields as well as express themselves both orally and in writing. Knowledge: Students know the English, German or French terminology of European trends of pedagogy as well as that of the theoretical background of new educational methods and their practice. Ability: Students are able to understand and study foreign-language articles related to European education trends. They can communicate about this field and are able to study special literature.
2.	International Models of Integration and Inclusiveness (English, German, French)	Students become familiar with the foreign methods and European models of integration and inclusion at school level by reading and studying authentic sources in the foreign language. Knowledge: Students acquire the vocabulary of the field of study at the intermediate level are well informed of the sources on the theory and practice of inclusion available in the printed and digital format. Ability: Students understand the main ideas of technical texts in the special field, are able to study and evaluate sources and obtain information independently.
3.	Inclusive Attitudes - Attitude shaping (English)	Concept, structure, objects, dimensions and functions of attitude. Attitude and behaviour. Stereotypes and prejudice. Types of disability. Conditions, advantages and disadvantages of integration and inclusion. Exploration of personal experiences about disability, special educational needs, integrated education and inclusion –positive and negative personal experiences, presentations of positive and negative situations related to this issues using multimedia. Evoking and generating positive emotions about people with special needs (concerning their life, difficulties and disadvantages). Knowledge: Students are aware of the importance of inclusion. They have knowledge about diversity, personal characteristics and inclusion. Ability: They are able to recognize and satisfy biological and psychological needs of infants with disabilities and capable of meeting them in a differentiated manner.

Programme: Pedagogy (Fall)		
No.	**Course name**	**Course description**
4.	Education of Children with Special Needs (English)	Subject Content: The concept and statutory definition of special educational needs. Concepts, content and history of integrative and inclusive education. Special types of disabled children - children with physical disabilities, children with visual impairment, children with hearing impairment. Mentally retarded children. Other psychical disorders. Collaborating institutions in understanding children with special educational needs. Knowledge: - Students are aware of the importance of the first years having a crucial role in children's future career; moreover, in terms of special educational needs, students have professional knowledge on the development and maturing period of children under 3, as well as on the factors influencing these processes. Ability: - Students are able to recognise young children's biological and psychological needs, and are capable to meet these needs in a differentiated way adapting to the children's developmental and maturing processes. - They can apply the learnt roles of infant education, are able to act trustfully and in a responsible way in terms of special educational needs.
5.	Case Study	Subject Content: The group consultation includes discussion and demonstration of general case management knowledge. Choosing and presenting cases will clarify competency. Knowledge: - Students are aware of the importance of the first years having a crucial role in children's future career; moreover, in terms of special educational needs, students have professional knowledge on the development and maturing period of children under 3, as well as on the factors influencing these processes. Ability: - Students are able to recognise young children's biological and psychological needs, and are capable to meet these needs in a differentiated way adapting to the children's developmental and maturing processes. - They can apply the learnt roles of infant education, are able to act trustfully and in a responsible way in terms of special educational needs.

Programme: Pedagogy (Fall)		
No.	**Course name**	**Course description**
6.	Musical Computer Science 1.	A detailed knowledge and use of software enhancing musical hearing and score editing software. Getting to know and using basic skills in connection with files (opening, saving, preparing templates, printing etc.), and in connection with data content (such as storing data, compaction, transposition, cutting, joining, exporting etc.). Knowledge: Students have basic knowledge of IT devices pertaining to the subject. Skills: They are able to integrate the acquired knowledge into a digital environment. They are able to use new IT devices in the planning and execution stage of application.
7.	Sports games (tennis)	The professional content of the course: Students become acquainted with the development and history of tennis and obtains some information about the role of this sport regarding the healthy way of life. Students receive theoretical and practical knowledge with which they are able to teach basic elements of tennis and adapt during games. This course should further provide a basis for a higher level of knowledge of this sport. Theoretical knowledge: defensive and offensive game, tournaments. Practical knowledge: service, volley, slice, short. Knowledge: Students have knowledge about the professional and formal possibilities of the application of the sport. They interpret the competition system and the structure of the association and student sport in its context. Ability: Students are able to apply the acquired organizational and management knowledge in an effective and practical way. They are able to cooperate.
8.	Philosophy	Greek philosophy. Medieval philosophy. The Renaissance and the Reformation. Rationalism and empiricism. Enlightenment, German idealism. Irrationalism, life philosophies (Nietzsche). The main trends of contemporary philosophy. The main trends of contemporary philosophy. The main questions of metaphysics and logic. The philosophical argument. Philosophy as a Life Exercise. Knowledge: Students have structured scientific knowledge of the philosophy of history. Ability: They are able to apply their philosophical knowledge adaptively in cultural mediation.

SOCIAL SCIENCES

At the University of Nyíregyháza, the field of Social Sciences incorporates Social Pedagogy (BA) as well as Youth Community Coordination (BA) as a part of Community Coordination (BA).

The objective of Social Pedagogy (BA) is to train professionals who are principally qualified to deal with the learning, social and mental problems of child and youth age groups in a complex way and in cooperation with the persons concerned to help them. Furthermore to sustain, to restore, and to develop the balance between the child or the youth and their surroundings. The students will efficiently contribute to preventing and handling social problems as well as to fostering social integration among the people affected.

Youth Community Coordination (BA) as a part of Community Coordination (BA) has the aim to train professionals who are primarily suitable for recognising problems within the youth age group and are competent enough to attend to the problems and to develop the social and economic status of the age group in question.

The courses delivered in a foreign language provide an insight for the students into the challenges met by the child and youth age groups as well as into the principal and methodical issues of the special help and stewardship related to the age groups.

Programme: Social Pedagogy BA (Fall)				
No.	Course name	Course code	Credit	Semester
1.	Sociology of Minorities	BSP2211	4	Fall
2.	Social Deviances	BSP2212	4	Fall
3.	Youth Policy and Youth Research	BSP2213	4	Fall
4.	European Trends in Pedagogy	BAI0058	4	Fall
5.	International Models of Integration and Inclusiveness	BAI0059	4	Fall
6.	Education of Children with Special Needs	BCG2139	4	Fall
7.	Inclusive Attitudes-Attitude shaping	BCG2137	3	Fall
8.	Project Proposals and Implementation	BAI0053	4	Fall

Programme: Social Pedagogy BA (Fall)		
No.	**Course name**	**Course description**
1.	Sociology of Minorities	Study of ethnically plural societies. Race, nation, ethnic group, minorities. Minority - majority. Minority typology. Racism, ethnocentrism, nationalism, stereotyping and prejudice, discrimination and xenophobia, immigrant minorities, immigration and ethnicity, integration, assimilation, multiculturalism. Nationalities in Hungary. Knowledge: Students have knowledge of society, the users of social pedagogy, its target groups and their environment. They are familiar with various social problems, unmet needs, and threatening factors. Students are familiar with the basic knowledge necessary for social assistance, especially relating to social studies, social politics and social work, and also to psychology, law, administration, health and pedagogy. Ability: Students can recognize the regularities of society, of systematically analysing them, of discovering and interpreting the causes and consequences of socially unfavourable situations.
2.	Social Deviances	The concept of deviance and its relation to social norms. Functions of deviance. Theories of deviance. Types of deviance and their incidence. Crime, suicide, alcoholism, drug use, and ways of measuring mental disorders. The forms and characteristics of deviance in the international scenes and in Hungary. Possible ways of prevention and correction. .Knowledge: They have knowledge of society, the users of social pedagogy, its target groups and their environment. They are familiar with ways of acquiring the knowledge needed for social assistance, and the most important sources of information. They are familiar with various social problems, unmet needs, and threatening factors. Ability: Students can recognize the regularities of society, of systematically analysing them, of discovering and interpreting the causes and consequences of socially unfavourable situations. They are able to apply social assistance methods. They are capable of recognizing, processing, analysing, managing and solving social problems, needs, and threats. They are able to analyse comprehensively the characteristics and the regularities of the socialization and personality development of the target groups of social pedagogy.

Programme: Social Pedagogy BA (Fall)		
No.	**Course name**	**Course description**
3.	Youth Policy and Youth Research	The concept of youth, its demographic and social characteristics. The methodology of youth research, the results of youth research. Dangers for young people. The use of stress-relieving techniques, the frequency of drug and alcohol consumption in youth groups. The concept of subculture and the analysis of today's youth subcultures. Young people of festivals, individualization and new alternatives to youth. Communities of difference. Knowledge: Students know the changed social status of youth, the sociological characteristics of each of the youth age periods. They understand the tensions arising from the transition. They know the branches of the youth life paths and the consequences of each path. They understand the concept of subculture and the lifestyle characteristics of each subculture of youth. Ability: They are able to design a sociological study among young people and communicate with any community of youth. They have empathy and tolerance for the young in a difficult position and deviant youngsters.
4.	European Trends in Pedagogy	Students get to know the English, German or French terminology related to European education trends. They are able to study the special literature in these fields as well as express themselves both orally and in writing. Knowledge: Students know the English, German or French terminology of European trends of pedagogy as well as that of the theoretical background of new educational methods and their practice. Ability: Students are able to understand and study foreign-language articles related to European education trends. They can communicate about this field and are able to study special literature.
5.	International Models of Integration and Inclusiveness	Students become familiar with the foreign methods and European models of integration and inclusion at school level by reading and studying authentic sources in the foreign language. Knowledge: Students acquire the vocabulary of the field of study at the intermediate level are well informed of the sources on the theory and practice of inclusion available in the printed and digital format. Ability: Students understand the main ideas of technical texts in the special field, are able to study and evaluate sources and obtain information independently.

Programme: Social Pedagogy BA (Fall)		
No.	**Course name**	**Course description**
6.	Education of Children with Special Needs	Subject Content: The concept and statutory definition of special educational needs. Concepts, content and history of integrative and inclusive education. Special types of disabled children - children with physical disabilities, children with visual impairment, children with hearing impairment. Mentally retarded children. Other psychical disorders. Collaborating with institutions in understanding children with special educational needs. Knowledge: Students are aware of the importance of the first years having a crucial role in children's future career; moreover, in terms of special educational needs, students have professional knowledge on the development and maturing period of children under 3, as well as on the factors influencing these processes. Ability: Students are able to recognise young children's biological and psychological needs, and are capable to meet these needs in a differentiated way adapting to the children's developmental and maturing processes. They can apply the learnt roles of infant education, are able to act trustfully and in a responsible way in terms of special educational needs.
7.	Inclusive Attitudes-Attitude shaping	Concept, structure, objects, dimensions and functions of attitude. Attitude and behaviour. Stereotypes and prejudice. Types of disability. Conditions, advantages and disadvantages of integration and inclusion. Exploration of personal experiences about disability, special educational needs, integrated education and inclusion – positive and negative personal experiences, presentations of positive and negative situations related to this issues using multimedia. Evoking and generating positive emotions about people with special needs (concerning their life, difficulties and disadvantages). Knowledge: Students are aware of the importance of inclusion. They have knowledge about diversity, personal characteristics and inclusion. Ability: They are able to recognize and satisfy biological and psychological needs of infants with disabilities and capable of meeting them in a differentiated manner.
8.	Project Proposals and Implementation	At the end of the term, students possess the foreign language skills required for special purposes that enable them to write project proposals and be engaged in their implementation. Knowledge: Students are familiar with presentation techniques and can understand and apply the basic terms of proposal writing in the foreign language. Ability: Students are able to work in project-teams and participate in project communication. They can perform tasks related to writing proposals and implementation of projects funded by the EU.

SPORT

Sport is a multidisciplinary academic field. On the basis of the selected courses, we provide opportunities to acquire theoretical and practical skills in the sport. The course catalogue of our institute includes training for sports organizers and physical education teachers. By enrolling in the aforementioned courses you can study in both fields to enhance your knowledge. The teachers of our institute are specialists who have extensive professional knowledge with decades-long experience and with national and international acclaim. You can master every skill of sportsmanship in a time-honoured institution, which has great traditions in training sports professionals.

Programme: Sport (Fall)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
1.	Anatomy	BSR1117	3	Fall
2.	Marketing	BAI0057	5	Fall
3.	Professional language of sports (English)	BSR2147	4	Fall
4.	European Trends in Pedagogy (English, German, French)	BAI0058	4	Fall
5.	Basic of Gymnastics	BSR1102	3	Fall
6.	Swimming	BSR1103	3	Fall
7.	Team Sports Games 1. (volleyball, soccer)	BSR2106	4	Fall
8.	Sport games (tennis)	BSR2151	4	Fall

Programme: Sport (Fall)		
No.	Course name	Course description
1.	Anatomy	The professional content of the course: This course aims to give students an overall study of the human body structure and of the musculoskeletal system. Students should be able to use this functional and complex knowledge in physical exercise and sport-movements, becoming experts in practice. Knowledge: Students know the main principles of the structure of the human body. They know the anatomical structure of the internal organs (cardiovascular system, respiratory, digestive system and urogenital system). They know the structure of the nervous system and its main elements. Students know the structure of the musculoskeletal system and the basic processes of motion control. Ability: Students are able to take anatomical considerations when designing an activity. They are able to judge the impact of a given activity on each organ system. By doing so, they improve the efficiency of their own work and they are able to help other sports practitioners' work (physical education teachers, coaches, recreation specialists, sports organizers) for example in the field of elite sports and bodybuilding.
2.	Marketing	The course aims to raise students' awareness of the special features of the consciously created marketing system of business organizations. The importance of market orientation and consumer-oriented thinking. Understanding the economic significance of marketing. Practical application of market research methods. Parts of the marketing elements, (7P Product-Price-Place-Promotion-People-Physical evidence-Processing). Macro - and microenvironment trends, market segmentation and positioning. Consumer behaviour, and market research methods and their application. (Data collection and analysis). The characteristics of services, the HIPI principle. Knowledge: Students are able to organize and manage market activities of enterprises. They can also determine the information requirements of marketing decisions, make preparatory proposals and make decisions. Ability: Students know the elements of the marketing system of businesses, are able to design and implement a marketing strategy individually and are able to cooperate with representatives of other fields. They are also capable of examining consumer habits and consumer satisfaction.

Programme: Sport (Fall)		
No.	Course name	Course description
3.	Professional language of sports (English)	The professional content of the course: At the end of the course students are familiar with the English terminology of different sports, sports medicine and dietetics, can study the specialized literature required for their profession and possess good communication skills in the foreign language in their special field. Knowledge: Students acquire the vocabulary of the field of study at the intermediate level, understand the basic concepts of physical education and the culture of health and have a clear view of the means and methods of their development. Ability: Students understand the main ideas of technical texts in their field of expertise, are able to study and evaluate sources and obtain information independently.
4.	European Trends in Pedagogy (English, German, French)	Students know the English, German or French terminology related to European education trends. They are able to study the special literature in these fields as well as express themselves both orally and in writing. Knowledge: Students know the English, German or French terminology of European trends of pedagogy as well as that of the theoretical background of new educational methods and their practice. Ability: Students are able to understand and study foreign-language articles related to European education trends. They can communicate about this field and are able to study special literature.
5.	Basic of Gymnastics	The professional content of course: The students become familiar with the basic concepts, terminology, movement material of gymnastics and sports gymnastics, and the wide range of its application possibilities. They are able to apply their methodological knowledge to instruct activities, plan practice series or strings and using exercise and gymnastics material they improve fitness, coordination skills and joint mobility. Knowledge: Students understand and are able to use in practice the terminology and movement material of gymnastics and sports gymnastics in possession of the acquired knowledge. Ability: They can design and execute the practice of gymnastics and sports gymnastics.

Programme: Sport (Fall)		
No.	Course name	Course description
6.	Swimming	The professional content of the course: This module is about the concept and importance of swimming, including the development and progress of different strokes and its effect on health. They are able to conduct school swimming lessons and organize swimming competitions. They know the age groups of swimming contestants. They are aware of the life-saving role of swimming and know water safety practices. They learn water-based activities and games, they learn theory, procedure and up-to-date methodology of swimming techniques in teaching breaststroke backstroke and freestyle. Knowledge: Students know the concept of swimming, the importance of its health effects. They have knowledge of organizing school swimming lessons. They know the basic biomechanics of swimming. They are familiar with water-based exercises and games, water safety exercises. They know the technical and practical exercises of freestyle and breaststroke. They provide the preparatory exercises for the dive. They know the start, the turn, the finish of the two strokes. They know the effects of swimming on health. Ability: Students are able to swim 50 meters in both strokes according to technical requirements, without time. They are capable of organizing a swimming competition. They are capable of monitoring a school swimming lesson. They are able to organize a swimming competition for sports organizations, local governments, recreational institutions and event organizing organizations. They are able to effectively apply the modern IT systems and tools used in swimming. They are able to write an in-class test on the requirements of the semester, at least on a satisfactory level.

Programme: Sport (Fall)		
No.	Course name	Course description
7.	Team Sports Games 1. (volleyball, soccer)	The professional content of the course: Volleyball: History of volleyball - domestic as well as international (its origin, stages of its development). Rules and keeping the records. The process of teaching sports games, supply system (age group competition). Free-time forms of handball (e.g. beach volleyball, mix volleyball). Statistical observation and investigation of volleyball games. Volleyball-specific application of preparatory and warm-up exercises. The aim of the course is to teach the up-to-date theory and practice of volleyball, as well as the basic methodology of instructing volleyball. Students also should be familiar with organizing games, championships and basic trainer tasks. Football: Brief history of ball games - domestic as well as international. The relation of teaching this subject to other branches of sports. Football: Attack and defence exercises: games from 1:1 up to 5:2. Playing systems in football. The aim of the course is to teach the up-to-date theory and practice of ball games, as well as the importance of the national league systems within the ball games. Knowledge: Students have knowledge about the professional and formal possibilities of the application of the sport. They interpret the competition system and the structure of the association and student sport in its context. Ability: Students are able to apply the acquired organizational and management knowledge in an effective and practical way. They are able to cooperate.
8.	Sports games (tennis)	The professional content of the course: The history of the branch of sport. Theoretical knowledge of the hit forms, the professional language, the rules. Students have knowledge about the footwork, the forehand and the backhand strokes for tennis. Footwork, movement on the baseline, defensive and offensive game. Rule knowledge. Competition Systems. Knowledge: Students have knowledge about the professional and formal possibilities of the application of the sport. They interpret the competition system and the structure of the association and student sport in its context. Ability: Students are able to apply the acquired organizational and management knowledge in an effective and practical way. They are able to cooperate.

Programme: Sport (Spring)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
9.	Physiology, First aid, accident prevention	BSR1218	4	Spring
10.	Statistics	BSR2252	4	Spring
11.	Theory and Method of Training, Development of Motor Skills 1.	BSR1204	4	Spring
12.	Sports Nutrition	BSR2219	3	Spring
13.	Professional language of sports (English)	BSR2249	3	Spring
14.	Team Sports Games 2. (Handball, Basketball)	BSR2209	4	Spring
15.	Tennis	TNO1035	2	Spring
16..	Environment and Sustainability	BAI0050	4	Spring
17.	Swimming	TNO1032	2	Spring
18.	PE and Folk Games	TNO1013	2	Spring
19.	Camps (Ski)	TNO1037	1	Spring

Programme: Sport (Spring)		
No.	Course name	Course description
9.	Physiology, First aid, accident prevention	The professional content of the course: This course aims to introduce to students how specific organs and organ systems work and how sport as intensive physical strain affects the body, and its consequences. It highlights the physiological responses to exercising and, based on this knowledge, the potentials of increasing physical performance Knowledge: Students know the structure of the human body, its main organ systems, their location and function. They know the structure of the muscular system and the basic processes of motion control. Students know the basic possible malfunctions of the muscular and the other main systems of the human body caused by physical activity. They can interpret and evaluate the information of the fitness measurements and draw the appropriate conclusions. They know the main principles of accident prevention and the various types of aid. Ability: Students are able to consider physiological aspects when designing an activity. They have sufficient knowledge to solve endurance and sports tasks. They can apply the information of the fitness evaluations in practice. They are able to recognize the tools of first aid and to apply it in practice.
10.	Statistics	Introduction to the basic conceptual system of statistics. The legal framework of statistical service, the informational system of Hungarian statistics. Methods of gathering data, preparing data for analysis. Analytical methods of descriptive statistics: graphic presentation, ratios, averages, scatter index numbers, empirical distributions, concentration analysis, indexes. Introduction to the methodology of sample-based evaluation. Analytical examination of timelines, prediction. Knowledge: Students are familiar with the basic concepts and relationships of statistics and understand the methods of analysis. Abilities: Students are able to observe and compare the socio-economic phenomena and processes. They are also able to reveal interconnections and draw conclusions. Students are suitable for solving complex tasks of corporate and government level in a flexible manner.
11.	Theory and Method of Training, Development of Motor Skills 1.	The professional content of the course: theoretical bases for measuring the development of motor skills, adaptation issues, loads, and components of performance, the biological background of conditioning and coordination capabilities. Knowledge: Students acquire the theoretical basis for measuring the development of motor skills, load and performance components. Ability: Students are able to create and develop conditions for health and lifestyle culture. They develop people's recreational and health culture, raise their standards.

Programme: Sport (Spring)		
12.	Sports Nutrition	The professional content of the course: This course is aimed to introduce to students general principles of sports nutrition. Sports nutrition links diet with physical performance. It considers the nutritional needs of all active people, covering the areas of health and performance in sports. It focuses on nutrition providing the fuel for exercise, recovery, performance and the essential elements for growth, maintenance and repair of the body's tissues. Knowledge: Students know the anatomical and physiological basis of the digestive system. They know the macro and micronutrients, their effects on the human body and performance. They know the most important areas of sports nutrition. Ability: By completing the subject, students acquire, rewrite and extend their knowledge of the processes and contexts of nutrition-sports nutrition. They are capable of recognizing the relations between nutrition and performance. They use data and recommendations for healthy eating.
13.	Professional language of sports (English)	The professional content of the course: At the end of the course students are familiar with the terminology of sports science, sports organization and management, can study the specialized literature required for their profession and possess good communication skills in the foreign language in their special field. Knowledge: Students acquire the terminology of their field of study at the intermediate level, understand the basic concepts of sports science and economics and have a clear view of the work and functioning of sports organisations. Ability: Students understand the main ideas of technical texts in their special field, are able to study and evaluate sources and obtain information independently while permanently improving their skills in the foreign language.

Programme: Sport (Spring)		
14.	Team Sports Games 2. (Handball, Basketball)	The professional content of the course: Handball: History of handball - domestic as well as international (its origin, and stages of its development). Rules and keeping the records. The process of instructing the sports games, supply system. Age group competition. Free-time forms of handball (e.g. beach handball). Statistical observation and investigation of handball games. Handball-specific application of preparatory and warm-up exercises. The aim of the course is to get to know the up-to-date theory and practice of handball, as well as the basic methodology of instructing handball. Students become familiar with organizing games, championships and basic trainer tasks. Basketball: Brief history of ball games - domestic as well as international. The relation of teaching this subject to other branches of sports. Basketball: Attack and defence exercises: in 1:1, 2:1, 2:2, 3:2, 3:3 game basic elements. Attack and defence systems in playing basketball. The aim of the course is to introduce the up-to-date theory and practise of ball games, as well as the importance of the national league systems within the ball games. Knowledge: Students have knowledge about the professional and formal possibilities of the application of the sport. They interpret the competition system and the structure of the association and student sport in its context. Ability: Students are able to apply the acquired organizational and management knowledge in an effective and practical way. They are able to cooperate.
15.	Tennis	The student becomes acquainted with the development and history of tennis and obtains some information about the role of this sport regarding the healthy way of life. Students receive theoretical and practical knowledge with which they will be able to teach basic elements of tennis during games. This course should further provide a basis for a higher level of knowledge of this sport. Theoretical knowledge: knowledge of regulation. Practical knowledge: - leg-work, motion on the basic line, - forehand,- backhand.
16.	Environment and Sustainability	Environmental problems cannot be solved in a sustainable way unless social and economic aspects are taken into consideration. This is one of the fundamental ideas of sustainability. This course should boost this attempt. Programme: Global environmental problems and their roots. Why sustainable development? Indicators of sustainable development. Ability: Students are capable of carrying out tasks related to the preparation and implementation of sustainability projects.
17.	Swimming	The aim of the course is to get the students information about the swimming in the healthy lifestyle. Know the importance of the swimming in the personal hygienic. Know the coordinating skills, aerobic endurance use the

Programme: Sport (Spring)		
		swimming movements. Be capable organize swimming education and swimming competition in the school. Acquainted with the up-to-date theory as well as the methodological procedures of breast-stroke and butterfly. The students have to get knowledge about the technology of the breast-stroke and the butterfly, connect with their start position, turning technology and the finishing. Get the knowledge of the national swimming rules. Students have to acquire the techniques of the breast-stroke and butterfly, the starts and finishing of these swimming sorts. Famous swimmers in this two swimming sorts. Biomechanics and muscles function of both swimming sorts, practical demonstrating of the technical elements. The national swimming rules of both swimming sorts. The technology of rescue from the water.
18.	PE and Folk Games	The subject has to contribute the development of the students' game demand and game culture with the help of the learnt physical educational and the people's games. They have to realise their developer effect through spatial awareness, the shape of body awareness, development of coordination, creativity, cooperation in different role plays, rule plays and task games. They have to learn the preparation, education, practice and application of the different movements by using well-chosen physical educational and people's games. They have to be able to contribute to making the out-of-class activities more variable and interesting. They have to realise the possibilities of positive personality development: follow the rules, self-control, cooperation, handling conflicts, communication, fair play. To make the students get to know the rudiments of game theory and the relationship between the game and the educational characteristics of children of different ages. The further theoretical task of the subject is to learn the methodical steps and tasks of game teaching in different fields of education. They have to get to know and use the physical and people's games. They have to actualize the organization and leading of the processed games with the help of their fellow students.

Programme: Sport (Spring)		
19.	Camps(Ski)	Students are expected to know and to able to analyse the basic movements of skiing. They will have the knowledge to organise water tours for groups. Finishing the module students should be able to save not only their own lives but those participants' in their group. They are expected to be able to help and give first aid to group members. They have to be able to analyse and present techniques of canoeing and kayaking applying different teaching methods. By the end of the course, students should be able to identify and name faults in paddling then applying the appropriate techniques to correct them. Location: Rusinski, Bialka Tatrzanska, Poland

VISUAL ART

This programme gives you a thorough knowledge of the most important trends, creators, and events of contemporary graphic arts. It delineates the main artistic efforts from the 1950s onward. It places special emphasis on presenting new ways and possibilities for painting and graphics in view of digital technology and the Internet. The course analyses the interactions between classical techniques and modern possibilities as well as the manifestations of globalism and multiculturalism. It presents the contemporary artistic endeavours of contemporary Hungarians (both in Hungary and abroad) and non-Hungarians in general, putting a special emphasis on painting and graphics while denoting new expressive and integrative approaches.

Programme: Visual Art (Fall)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
1.	Contemporary painting I.	BKA2135	4	Fall
2.	Marketing	BAI0057	5	Fall
3.	European Trends in Pedagogy (English, German, French)	BAI0058	4	Fall
4.	Business Communication (English, German, French, Russian)	BAI0052	4	Fall
5.	Contemporary Graphic Arts I. (English)	BKA2146	4	Fall
6.	Environment and Sustainability	BAI0050	4	Fall
7.	Project Proposals and Implementation	BAI0053	4	Fall

Programme: Visual Art (Fall)		
No.	Course name	Course description
1.	Contemporary painting I.	The subject presents the knowledge of the pre-art art history courses in the second half of the 20th century. The main artistic/painting trends, their most important characteristics, their creators and creations, and the fundamental theoretical problems of these tendencies up to the present. Important part of the course is the categorization of each period (neo-avant-garde, postmodern), trends (abstract expressionism, lyrical and geometric abstraction, colour field, pop and op art, nouveau realism, flux, hard edge, minimal, land, process, concept art, etc.), explanations of the artistic phenomena (graffiti, feminine art, new sensitivities, etc.) and the underlying intellectual problems. The exact demarcation of the concepts, gender, genres (happening, body art, action, performance, installation, computer-print, video installation) and the motivation of their appearance. The subject focuses primarily on painting aspirations, but because of the plural nature of the period, it touches the main points of attachment with novel forms other than this tradition. In addition to presenting contemporary trends and trends, art galleries, important painting symposiums and biennials are also being discussed.
2.	Marketing	The course aims to raise students' awareness of the special features of the consciously created marketing system of business organizations. The importance of market orientation and consumer-oriented thinking. Understanding the economic significance of marketing. Practical application of market research methods. Parts of the marketing elements, (7P Product-Price-Place-Promotion-People-Physical evidence-Processing). Macro –and microenvironment trends, market segmentation. Consumer behaviour, and market research methods and their application (data collection and analysis). The characteristics of services, the HIPI principle. Knowledge: Students are able to organize and manage market activities of enterprises. They can also determine the information requirements of marketing decisions, make preparatory proposals and make decisions. Ability: Students know the elements of the marketing system of businesses, are able to design and implement a marketing strategy individually and are able to cooperate with representatives of other fields. They are also capable of examining consumer habits and consumer satisfaction.

Programme: Visual Art (Fall)		
No.	Course name	Course description
3.	European Trends in Pedagogy (English, German, French)	Students know the English, German or French terminology related to European education trends. They are able to study the special literature in these fields as well as express themselves both orally and in writing. Knowledge: Students know the English, German or French terminology of European trends of pedagogy as well as that of the theoretical background of new educational methods and their practice. Ability: Students are able to understand and study foreign-language articles related to European education trends. They can communicate about this field and are able to study special literature.
4.	Business Communication (English, German, French, Russian)	By the end of the term, students have a clear view of the basic situations the employees of foreign companies should be familiar with and acquire the fundamentals of foreign language technical terminology. Therefore they will have better chances of competing in the labour market. Knowledge: Having completed the course students know foreign language terminology related to the world of business and have an insight into the world of work through their acquired knowledge of the foreign language and culture. Ability: Students can communicate about related topics in the foreign language and react properly in the most common situations at the workplace. They are able to express their opinion orally (e. g. when telephoning, making arguments or giving presentations) as well as in writing (e. g. in business correspondence or reports) at the intermediate level. They are also prepared to write a CV and a covering letter and participate in a job interview, introducing themselves and presenting their professional background.
5.	Contemporary Graphic arts I. (English)	Discovering the genres of contemporary Hungarian graphics, exploring the genre-specific features of the new multiplication techniques in the context of contemporary fine arts. Systematization and interpretation of user and consumer circles of the new millennium prints and language. The technical features of the digital image and the print. New Media Graphics Techniques. Digital pressure techniques. Xerox, print, project, poster and wallpaper. Printed art book. Transfer techniques. Marginal appearances on the boundaries of painting and graphics. Street Art stencils, stickers, posters, printed conceptual materials. The relation between conceptual graphics and photography. Graphics and installation. Web graphics.

Programme: Visual Art (Fall)

No.	Course name	Course description
6.	Environment and Sustainability	Environmental problems cannot be solved in a sustainable way unless social and economic aspects are taken into consideration. This is one of the fundamental ideas of sustainability. This course should boost this attempt. Programme: Global environmental problems and their roots. Why sustainable development? Indicators of sustainable development. Ability: Students are capable of carrying out tasks related to the preparation and implementation of sustainability projects.
7.	Project Proposals and Implementation	At the end of the term, students possess the foreign language skills required for special purposes that enable them to write project proposals and be engaged in their implementation. Knowledge: Students are familiar with presentation techniques and can understand and apply the basic terms of proposal writing in the foreign language. Ability: Students are able to work in project-teams and participate in project communication. They can perform tasks related to writing proposals and implementation of projects funded by the EU.

Programme: Visual Art (Spring)				
No.	**Course name**	**Course code**	**Credit**	**Semester**
8.	LSP: Music Pedagogy (English) E-learning	CI3010	2	Spring
9.	Artistic creation II.	BKA2221	5	Spring
10.	Drawing studies II.	BKA2224	6	Spring
11.	Drawing studies IV.	BKA2226	6	Spring
12.	Creative process II.	VKO1016	5	Spring
13.	Contemporary painting II.	BKA2236	4	Spring
14.	Contemporary Graphic arts II. (English)	BKA2247	4	Spring

Programme: Visual Art (Spring)		
No.	Course name	Course description
8.	LSP: Music Pedagogy (English) E-learning	The topic areas of the course - which is an integral part of the programme of music culture and music pedagogy besides other courses conforming to international demands - has a twofold aim: to develop language competences in a complex way and help master technical terminology. Students can gain expertise in the topics either with individual or group work. The primary aim of the course is the practice of English with a focus on the relevant themes. Necessary preliminary knowledge: basic knowledge of music. Knowledge: Students have knowledge of basic music and music theory. Skills: They are able to process B1 level English texts. They are able to characterise the musical material of compositions of different styles and genres with the help of scores, audio and video files. They are able to define music concepts and use them. They are able to study autonomously.
9.	Artistic creation II.	Historical examination of the possibilities of visual expression. The path of imaging from camera obscura to digital imagery. Image-signal-writing-symbol. Vision and Cognition. The mode of action of the artwork. The relationship between artwork and viewer. The visual language, the laws of image building, the relationship between content and form, function and form. The visual appearance of aesthetics; Rhythm, proportions, symmetry balance, line-patch-plastic, problematiques of the space and mass, phenomena of the dark-light-colour-colourless, issues of static, dynamic, balance shift. Making style exercises, paraphrases and transcriptions. Examining the effect factors of the expression elements in compositions, in different depiction. Questioning of the image-building process in an autonomic way; monitoring the problem from idea to execution. Designing compositions under certain conditions. Analyse the problematiques of a figure as a composition element in different depiction systems, sizes, formats and materials. Examining relationships of colour and tone as elements of image formatting. Composition building: figure in interior space; Processing graphically, respectively. With picturesque tools. Composition building: still life in interior space; Processing graphically, respectively. With picturesque tools. Composing part of the human figure: portrait; Graphically, respectively. with picturesque tools. Designing an autonomous programme.

Programme: Visual Art (Spring)		
10.	Drawing studies II.	Artistic anatomy. Structure, proportionality, age and gender of the human body. Skeleton system, structure, the functional and formative study of joints with different functions. Linkage of the muscle to the frame structure; rooting, adhesion. Examination of the outer surface of the surface muscles and deeper muscles. Interpretation of changes in motion. The difference between the proportions of the male and female body. The acquisition of anatomical knowledge during drawing studies, structural and functional analyses. Drawing analysis of the general structural principles of the human body, static laws. Balance. Centerpoint, counterpoise. Analysis of the structure and correlations of the bone and muscle system. The issue of proportionality and proportionality. The most characteristic structural relationships of the head. The muscles of the head. Highlighting movement and function. The formulation of the human body in art formulation through the manifold use of already familiar materials and tools (graphite, pitt, carbon, clack ink, paper). Various representations of the human body through various drawing techniques, e.g. Five-minute sketches, skeletal drawings, half-hour or larger drafts with a line or tone design. Analytical drawings of larger structural units (shoulder, pelvis, etc.), hand and foot studies, live model drawings. croquis: The most important character of the movement of the human body along the lines of summary lines. Drawings of different postures and positions.
11.	Drawing studies IV.	Bodyshape Drawing: figure, nude with the actual environment. Nude: Through the structure and proportions of the human body, the processing of cognition of special drawing tools. It is safe to get the drawing skills that reveal the relationships and emphasize the construction. Anatomically illustrated display of anatomical points of the human body. Compositional exercises (whole figure, act and space context, the design of multiple figurative compositions). Standalone problem layering with visualization, fixing and processing the problem in the way already known. Examining and analysing the effect factors of expressive elements on their own plans and compositions. The free use of different representations and representation conventions for the drawing, visual expression with various technical means (chalk, burnt cartoon, clack ink, marsh, watercolour, tempera) The use of new materials and techniques within the given drawing and painting. The role of the subject in the choice of materials, tools, language elementary elements, individuality, and individual performance. Study and analyse classical and contemporary art examples in relation to the issue concerned, seeking individual solutions to overcome the academic level. It is a goal of getting to know the drawing/painting cognition and the theoretical lessons of observation at a higher level during the work of the studio; From simple imitation (imitation level) to the various degrees of image abstraction.

Programme: Visual Art (Spring)		
12.	Creative process II.	The objective of the course/Description of the competences to be mastered: Based on their former drawing experiences students will have the chance to solidify their knowledge in connection with the expressive possibilities of the arts, they will be able to explore and make use of these relationships in their works during class and individual tasks. It is necessary that during further studies the laws of visual and graphic construction, as well as the problems of composition, are to be clarified. It is important that students will investigate the fundamentals of expression and at the same time, they will get to know recent technical possibilities (colour potentials, collages etc.). Knowledge to be mastered: In the field of visual representation: Comprehensive compositional analysis of a figure with a functional representative and expressive contents. The objective interpretation of the shape-form-figure motif. The figure as a spatial component, the figure as a visual component, the figure as a motif in composition and in different graphical expressive systems. How to enable the artistic process of specific expressive use of forms. Compositional analysis of the possibilities of the plain as the vehicle of representation.
13.	Contemporary painting II.	The course, based on the knowledge of the previous semester, transforms the decisive tendencies and creative strategies of Hungarian contemporary painting from the post-World War II. up to the present day. The objects interpret the individual works in the historical, political, social and cultural context of an era, through approaches that shaped the thinking of contemporary art on a contemporary level and in our country as well. The subject spells on the antecedents of modern Hungarian painting (end of the century and century-old painting, Ferenczy-Gulácsy-Csontváry-Vajda line). The domestic classical avant-garde of Hungary, in addition to the abstract and surrealistic aspirations, deals with the period of the post world war II. (European School, Group of Abstract Artists), with decades of narrow art policy (the Socreal, the "Three T" era). High lighting the rules of the pioneering 1960s (Csernus Circle, Lakner Circle, Zuglói Circle), the decisive exhibitions of the period (Iparterv I-II, Szürenon) and the 70s, 80s, 90s, (E.g., new sensibility) and the art of our creators emigrated to the West. The subject also tries to make the picture of the style pluralism of contemporary Hungarian painting painted during the semester, while recalling the special locations, groupings and creators of the domestic underground (Balatonboglár Kápolarnárat, Szentendre VLS, etc.).

Programme: Visual Art (Spring)		
14.	Contemporary Graphic arts II. (English)	Discovering the genres of contemporary graphics, exploring the genre-specific features of the new multiplication techniques in the context of contemporary fine arts. Systematization and interpretation of user and consumer circles of the new millennium prints and language. The technical features of the digital image and the print. New Media Graphics Techniques. Digital pressure techniques. Xerox, print, project, poster and wallpaper. Printed art book. Transfer techniques. Marginal appearances on the boundaries of painting and graphics. Street Art stencils, stickers, posters, printed conceptual materials. The relation between conceptual graphics and photography. Graphics and installation. Web graphics.

NYÍREGYHÁZI
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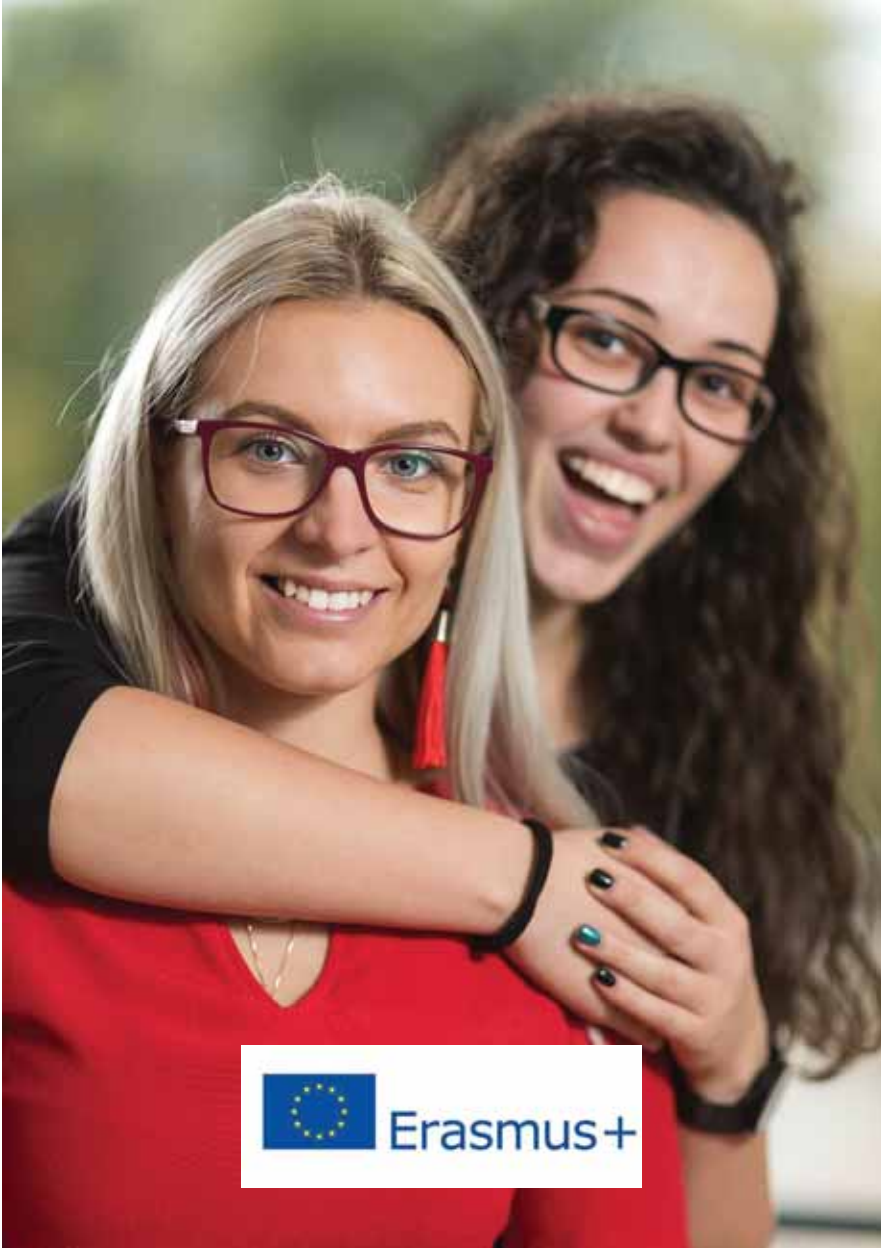
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