Erasmus+ Complete Guide

The City of Nyíregyháza and The University of Nyíregyháza



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UNIVERSITY OF NYÍREGYHÁZA











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DEAR READERS, DEAR YOUNG PEOPLE,

s 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 openminded 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.

NYIREGYHA

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 openmindedness 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 rasmus+ Complete Guide

UNIVERSITY OF NYIREGYHÁZA

DEAR STUDENTS, DEAR COLLEAGUES,

elcome to the University of Nyíregyháza! Thank you for choosing our university!

2023 marked the 36th 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.

The familial apmosphere of the campus and the city itself, the green infrastructure and the cultural and sport life offer a unique livable opportunity to accommodate the students who come here.

We sincerely look forward to welcoming you to the University of Nyíregyháza and we wish you a successful stay!

Dr. György Szabó Rector





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.

e 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 facade. 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."





he 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 stainedglass 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 crossnave. 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.





utca, one can see the empire-style building of the County Court, with the recently inaugurated Public

As we continue our stroll along Zrínyi llona 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



earby, 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.







ack 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 Kállav (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,



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.

Országzászló 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 llosvay, the medal collection of Baron Gábor Apor and a 13-thousand volume library.

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The bronze statue of György Bessenvei, 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, neoclassicist 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 ter 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.





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.

Today the Luther-ház house one of the best social meeting place for the people of Nyíregyháza. The Teahouse offer special blended teas of all varieties in a comfortable and beautiful environment.

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 (chemistresearch 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.

Cóstógyógyfürdő 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 mustsee. 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

urther 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.





urning 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.

Next to the Tófürdő is one of Europe most famous Animal Parks, the Nyíregyháza Zoo, which was awarded the title of Europe's best zoo in 2015, 2018 and 2020. The Zoo is set deep in Sóstó's natural, almost undisturbed, oak forest. The 30 hectares of land are divided into world sections where visitors can wander the globe and observe how the park's 5,000 animals are living here grouped by continent in semi-natural enclosures. The visitors can take a rest and enjoy lunch and dinner in one of the park's restaurants or even choose to stay in one of the hotels, located in the park's territory.



urther 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 OFFICE

- **11** POST OFFICE
- **12 BOTANICAL GARDEN**
- **13 SPORT CENTER**

Address:

University of Nyíregyháza International Relations Office H-4400 Sóstói út 31/B Nyíregyháza, Hungary Website: english.nye.hu Email: erasmus@nye.hu Phone: +36 42 599-495 Fax: +36 42 402-485



Contact us!

UNIVERSITY OF NYÍREGYHÁZA



ABOUT THE ERASMUS+ KA 131 AND KA 171 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 2021-2027. 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, practiceoriented 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 computer science. 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 Office 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: english.nye.hu

Accommodation

The Erasmus+ exchange students arriving to University of Nyíregyháza are provided accommodation in the Hotel Sandra youth hostel, located in the University's campus area.

The hotel has 184 rooms with 2 beds, 8 apartment rooms with 3 beds and 18 rooms with 2 beds. The apartments have a kitchenette and bathroom, while the standard rooms have a bathroom. All rooms are equipped with direct internet connection, telephone and cable TV. The Hotel can accommodate 428 people at a time.

The following services are provided additionally for the comfort of our guests:

- 24-hour reception
- Convenience store
- Student Restaurant
- Gym
- Laundry service
- Parking Lot service

The University's swimming pool, arboretum and sports centre are also directly connected to the hotel.

Further information is provided by the Hotel Sandra's own website: https://hotelsandra.hu/



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/

International Relations Office

The International Relations Office 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+, CEEPUS and others scholarships. The course catalogue for incoming Erasmus+ students can be found here: english.nye.hu

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University of Nvíregyháza

Practical Information

Useful Links:

http://www.nye.hu http://www.nyiregyhaza.hu http://www.studyinhungary.hu http://visithungary.com http://www.nyiregyhaza.info.hu/en

Academic Calendar:

http://english.nye.hu >>students (menu) >>academic calendar (PDF)

Accommodation:

http://koli.nye.hu http://hotelsandra.hu http://bessenyeihotel.hu





More videos about our Campus here:



Always wondering how a pilot learn to flight? Watch now:










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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).

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





Proc	iramme: A	aricult	ural End	ineering	BSc (Sprina)

No.	Course name	Course description
1.	Agricultural	Course objectives: The overall objective is to provide the students with sufficient knowledge to master the
	Ligineening	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 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 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	BAI0191	6	Fall
3.	Programming Languages I.	BAI0181	6	Fall
4.	Operations Research	BPI2146	5	Fall
5.	Network Operating Systems and IoT technology	BAI0192	3	Fall
6.	GUI programming	BAI0193	4	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. The course concentrates on practical programming exercises using programming language C.

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.



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No.	Course name	Course code	Credit	Semester
7.	Programming Languages II.	BAI0182	6	Spring
8.	Operating Systems	BAI0180	6	Spring
9.	Discrete Mathematics	BAI0174	6	Spring
10.	Database Systems	BAI0169	5	Spring
11.	Data Structures and Algorithms	BAI0170	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. In these years, Java is on the center of focus.
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. 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 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.



No.	Course name	Course code	Credit	Semester
1.	Business Communication (English)	BAI0052	4	Fall
2.	Digital Applications	BAI0001	3	Fall
3.	International Tourism Geography	BFD2159	4	Fall
4.	International Models of Integration and Inclusiveness (English)	BAI0059	4	Fall
5.	Business Communication and Protocol	BAI0023	3	Fall
6.	Marketing	BAI0031	4	Fall
7.	Business Economics	BAI0030	5	Fall

Programme: Economic Science (Fall)

Programme: Economic Science (Fall)

No.	Course name	Course description
1.	Business Communication (English)	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.	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.
3.	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.
4.	International Models of Integration and Inclusiveness (English)	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.

5.	Business Communication and Protocol	The purpose of this subject is to acquaint students with the basics of effective interpersonal communication and its situations with the validation possibilities of "motivational" and "information" functions. Students learn about the role of business protocols, the foundations and formulas of European behavior culture. The basic model, functions and interactions of communication. The presentation, the lecture, the discussion, the meeting. The forms of nonverbal communication. Business correspondence. Etiquette and protocol in business.
6.	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 micro environment 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.
7.	Business Economics	The course aims to give students a comprehensive and systematic overview of the theoretical and practical knowledge they have to acquire to start a business enterprise. Students learn about the basic economic theories and definitions, the general features of the structure, function and operation of a business enterprise as an organisation and as an economic system. They have a clear view on the social, economic and financial environment of enterprises as well as the main conditions for setting up, managing and eliminating various types of enterprises. They are also aware of the advantages, disadvantages and obligations of the main types of enterprises, and stakeholders of entities and their main aims.

Programme:	Economic Science (Sprina)

No.	Course name	Course code	Credit	Semester
8.	Communication in the Office (English)	BKS2228	4	Spring
9.	Operating Systems	FPI2220	7	Spring
10.	Basics of Economics	BAI0020	3	Spring
11.	Discrete Mathematics	BAI0174	6	Spring
12.	Business Communication II. (English)	CI3014	2	Spring
13.	English for Special Purposes: Commerce and Trade	CI3008	2	Spring

Programme: Economic Science (Spring)

No.	Course name	Course description
8.	Communication in the Office (English)	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.
9.	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.
10.	Basics of Economics	The basic aim of the subject is to develop the biological thinking and attitude of students. It is a basic course based on the knowledge acquired in secondary school. During the semester, following topics are covered: Biology as a subject and science. The classical and modern tools and methods of biological research. Systematization of the living environment. The composition and biological processes of organisms. The anatomy and physiology of the human body. Ecological fundamentals. Supra-individual formulation levels of living environment. Ecological worldview. Nature and environmental protection. Basics of classic and modern genetics and its practical and theoretical possibilities. Evolution of living environment and humans. Behaviour patterns of animals.

11.	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.
13.	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.





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.

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. Classification of plane moving mechanisms. Dynamic examination of plane moving mechanisms. 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. 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: En	aineerina	I Sciences ((Spring)
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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.




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.	Introduction to Literature	BAN1114	4	Fall
2.	Introduction to British Culture	BAN1115	4	Fall
3.	Presentation Techniques	BAN1307	3	Fall
4.	Phonetics and Phonology	BAN1308	3	Fall
5.	British Literature 1. From the Beginnings to the 19th Century	BAN1309	3	Fall
6.	American Literature 1. The Colonial Period and the 18th Century	BAN1310	3	Fall
7.	The History of the British Isles	BAN1311	3	Fall
8.	The History of English	BAN1508	3	Fall
9.	British Literary History 3. The 20th century	BAN1509	3	Fall
10.	American Literature 3. The 20th Century.	BAN1510	3	Fall
11.	Sociolinguistics and Dialectology	BAN1511	3	Fall

Programme: English Language and Culture (Fall)

No.	Course name	Course description
1.	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.
2.	Introduction to British Culture	The gives an insight into the culture and everyday life of the United Kingdom. Students are expected to make differences between political and geographical concepts like the United Kingdom, Great Britain and the British Isles. Topics include: Different regions of the UK. Main symbols of the British Isles. The political system and the role of the monarhy. The legal system. The welfare system. The education system. Social structure. Students are expected, in possession of their language skills obtained so far, to orientate themselves in the culture of the British Isles. Religion.
3.	Presentation Techniques	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. The use of different rhetorical devices will get emphasis (such as repetition, question, parallels), just like the means of creating and maintaining attention, the harmony of verbal and non-verbal communication, body language, appearance and flexibility. The course also develops productive language skills (speaking skills, intonation and proper pronunciation), as well as linguistic creativity.

4.	Phonetics and Phonology	The course introduces students to the sounds and sound patterns of English. We will deal with the articulation of speech sounds, the place and manner of articulation of the English vowels and consonants, word stress and intonation, the concept and types of syllables, suprasegmental phonology: word stress, rhythm and assimilation, elision and linking and intrusive consonants. We will also put an emphasis on practising phonetic transcription.
5.	British Literature 1. From the Beginnings to the 19th Century	The course gives an overview of the main periods and significant writers of British literature from the beginnings to the beginning of the 19th century. Topics covered include: Old English poetry, Middle English poetry, the beginnings of drama, morality plays. Chaucer, the father of English poetry. The literature of the Renaissance, significant playwrights, Shakespeare and his contemporaries. Sonnet writers (Wyatt, Surrey, Sidney, Spenser). Metaphysical poetry (Donne). Neoclassical trends in drama (Ben Jonson), and the theatre of the Restoration period. The literature of the Enlightenment (Pope, Defoe, Swift) and the period of sentimentalism (Gray, Richardson, Sterne, Fielding). Theatre in the 18th century: ballad opera and domestic tragedy.
6.	American Literature 1. The Colonial Period and the 18th Century	The course aims to present the time-line development of American literature focussing on mile-stone events, major representatives and various trends in the colonial period and in the 18th century. Writers to be discussed during the course: John Smith, William Bradford, Anne Bradstreet, William Byrd Jonathan Edwards, Benjamin Franklin
7.	The History of the British Isles	The objective of the course is to introduce students into 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.

8.	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. Topics to be covered: the causes and levels of linguistic changes (phonetic, morphological, syntactic, semantic changes). A historical overview from the Indo-European family to modern English, with special attention to Grimm's Laws, the Norman- French influence and the Great Vowel Shift.
9.	British Literary History 3. The 20th century	The course introduces students to literary, intellectual currents and social phenomena after 1900 that had a decisive effect on the formation of British , through the examination of fiction, poetry, drama and film. Topics include Modernism in drama (the Irish Renaissance), in the novel (Conrad, Joyce, Woolf, D. H. Lawrence) and in poetry (T. S. Eliot), the relationship of class and literature, the phenomenon of "Angry Young Men" , the connection between absurd theatre and existentialism, the relationship of Empire and literature (postcolonialism), certain aspects of British and American postmodern, the different aspects of feminism and gender, etc.
10.	American Literature 3. The 20th Century.	The course aims to present the time-line development of American literature focussing on mile-stone events, major representatives and various trends. Topics to be discussed during the course: regionalism in William Faulkner, naturalism and realism in Jack London, and Theodore Dreiser. The "Lost Generation": Ernest Hemingway, F. Scott Fitzgerald. "The Beat Generation": Allan Gingsberg, Jack Kerouac, J. D. Salinger, Anzia Yezierska.
11.	Sociolinguistics and Dialectology	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. Topics: the nature and causes of language change; regional differences within the UK, Irish, Scottish variants, regional differences in the USA, Australian English, social and ethnic differences, sociolects, slang.

Programme: English Language and Culture (Spring)

No.	Course name	Course code	Credit	Semester
15.	Introduction to Linguistics	BAN1215	3	Spring
16.	Integrated Language Skills	BAN1214	6	Spring
17.	Introduction to American Culture	BAN1216	3	Spring
18.	Morphology	BAN1407	4	Spring
19.	Syntax	BAN1408	3	Spring
20.	British Literature 2. The 19th Century	BAN1409	3	Spring
21.	American Literature 2. The 19th Century.	BAN1410	3	Spring
22.	The History of the USA	BAN1411	3	Spring
23.	Anglo-Hungarian Cultural Contacts	BAN1609	3	Spring
24.	Pragmatics	BAN1610	3	Spring
25.	Stylistics	BAN1611	3	Spring

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Programme: English Language and Culture (Spring)

No.	Course name	Course description
15.	Introduction to Linguistics.	The lectures 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. Topics include: the concept of language, the system of linguistic facts and signs, the methods of linguistics (synchrony and diachrony); descriptive linguistics vs. historical linguistics. Langue vs. parole, the concept of linguistic competence. The basic tenets of schools of linguistics, and their representatives - structuralism, American descriptive linguistics. The main branches of linguistics and their related areas. The interdisciplinary nature of linguistics and their related areas the interdisciplinary nature of linguistics and its relation to anthropology, psychology, neurology, sociology, literature and language teaching.
16.	Integrated Language Skills	During the course, which is a follow-up on first-year foundation skills courses, students gain a deeper insight into the grammatical structures, the nuanced use of terms and a more varied use of vocabulary. The aim of the course is to develop the receptive and productive skills in an integrated way with the help of skill development tasks.
17.	Introduction to American Culture	The objective of the course is introduce students into 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. Main topics include: pre-Columbian America. The first colonies and the War of Independence. Symbols of America. Main festivals like Thanksgiving and Halloween. Main historical figures. The political system and the constitution, the system of "checks and balances". Multiculturalism, immigration, Hispanic communities.

18.	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.
19.	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.
20.	British Literature 2. The 19th Century	The course covers the following themes: The poetry of Romanticism. The novel of manners and the historical novel (Jane Austen and Walter Scott). Victorian and late Romantic poetry (Tennyson, Browning, Rossetti). Significant Victorian novelists (Dickens, the Bronte sisters, George Eliot, Thomas Hardy). The effect of Ibsenism in drama, G. B. Shaw.
21.	American Literature 2. The 19th Century.	The course aims to present the time-line development of American literature focussing on mile-stone events, major representatives and various trends. Writers to be discussed during the course: Washington Irving, James Fenimore Cooper Edgar Allan Poe; Ralph Waldo Emerson, Henry David Thoreau, Nathaniel Hawthorne, Herman Melville, Mark Twain, Jack London, Frank Norris, Stephen Crane.
22.	The History of the USA	The colonial background, relations between the British Empire and her North American colonies. From 1783 to the War of 1812. Economic, cultural and territorial expansion between 1814 and 1861. American politics in the antebellum period. The Civil War. The Reconstruction. The Gilded Age. Reform and Progressivism (1901-1919). The interwar period, the "Roaring Twenties". The Great Depression and the New Deal. World War II. Post-war US.

23.	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 into 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.
24.	Pragmatics	Pragmatics is the discipline strongly related to social practices as it studies the relation of signs to interpreters. It studies language from functional perspective and attempts to explain certain aspects of linguistic structure by reference to non-linguistic pressures. Topics: implicature, presupposition, deixis, discourse analysis, forms of courtesy, irony, Grice's maxims, Austin and Searle's speech act theory, the difference between constative and performative functions, locutionary, illocutionary and performative pragmatic aspects are also introduced. The course improves the use of language fitting the context, the right interpretation of enunciations, in short, foreign language and mother tongue awareness.
25.	Stylistics	The aim of the course is to present a brief history of the discipline, to define its main notions (style, style as connotation, stylistic cohesion), to present the relationship between text types (genres) and style, and to demonstrate the characteristic features of different functional styles. The practical aim of the course is to develop the sensitivity to style and creating an awareness of the interdisciplinary characteristics of the subject area (embracing fields of textology, pragmatics, poetics and rhetoric); and also making students aware of the interplay of language, thought and emotion. Special emphasis will be given to literary styles (touching upon denotation, connotation, tropes, figures). Seminars will be devoted to the analysis of various artistic and non-artistic texts, highlighting the relations between style and function.



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.

No.	Course name	Course code	Credit	Semester	
1.	Geopolitics and globalization	CB3325	2	Fall	
2.	Geoinformatics and database management	OFD2003	3	Fall	
3.	Geographical processes in space and time	OFD2004	3	Fall	
4.	Physical geography 1.	OFD2002	3	Fall	
5.	International Tourism Geography	BFD2159	4	Fall	

Programme: Environmental Sciences (Fall/Spring)

Programme: Environmental Sciences (Fall/Spring)

No.	Course name	Course description
1.	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: Definitions of globalization. Views of globalization (sceptics, hyperglobalizers). The history of globalization. The economic dimension of globalization. The political dimension of globalization. The cultural dimension of globalization. The ideological dimension of globalization. Challenges to globalism. Assessing the future of globalization.
2.	Geoinformatics and database management	The course aims to introduce students to the theoretical background and characteristics of geographic information systems (GIS), to the steps of geoinformatics modelling, and to raster and vector based systems. Topics of the course: The concept and development of GIS. Components of GIS. Spatial phenomena and their modelling. Attributes. Data sources and data types in GIS. Data quality, errors. General description of the ArcGIS software package. Introduction and basic functions of the ArcMap software. View and edit maps. Layers, projections, queries, data management, projection systems, importing and exporting data, file conversion. Finalizing and publishing thematic maps.
3.	Geographical processes in space and time	The purpose of the course is that students learn about the geographical skills in everyday life. Recognise a society geared to nature and space, dynamically changing weather conditions. Get to know the possibilities of direct and indirect observation of the natural environment to obtain information. In this way they are able to interpret the world, taking place in the geographical processes.
4.	Physical geography 1.	The course aims to provide students with geospheres learn about the complexity of the process of formation , nature and the laws of certain elements of the geospheres, and the knowledge gained possession of the individual about geosphere able to develop correctly reflect the true picture. The evolution and structure of the Earth, theories about its construction. Geophysical characteristics of the earth: causes of earthquakes, earth magnetism. An overview of the geomorphology aspects of plate tectonics and volcanism. Presentation of geomorphological processes. Geography of water. Physical and chemical properties of water. Earth's water resources and the origin of water resources. Circulation of water, water balance.

5.	International Tourism Geography	Students get acquainted with the tourism geography of the most frequented regions of Europe and other continents. Culture and tourist attractions of the important destinations, some countries and your own countryare presented. They learn what kind of economy-boosting means are available for tourism. Students are able to inform and guide the guests of sending countries during their tourism work, knowing the customs and culture of the host countries and regions. Tourism geography of the Americas. Tourism geography of Asia, of Africa and Oceania. They get to know world heritage sites, UNWHO. Central European countries Tourism in Hungary and they gain insight a Szabolcs-Szatmár-Bereg county. The position of the tourism in the destination of the student's residence.
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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, and Ukrainian; professional language training is in English and German





General and Professional Foreign Language Courses (Optional) (Fall/Spring)

No.	Course name	Course code	Credit	Semester
1.	Foreign Language I. (English, German, Ukrainian)	CI3001	2	Fall/Spring
2.	Foreign Language II. (English, German, Ukrainian)	CI3002	2	Fall/Spring
3.	Foreign Language III. (English, German, Ukrainian)	CI3003	2	Fall/Spring
4.	Foreign Language IV. (English, German, Ukrainian)	CI3004	2	Fall/Spring
5.	Foreign Language V. (English, German, Ukrainian)	CI3005	2	Fall/Spring
6.	Foreign Language VI. (English, German, Ukrainian)	CI3006	2	Fall/Spring
7.	Foreign Language VII. (English, German, Ukrainian)	CI3007	2	Fall/Spring
8.	English for Special Purposes: Commerce and Trade	CI3008	2	Fall/Spring
9.	Tourism and Catering (English, German)	CI3011	2	Fall/Spring
10.	Business Communication I. (English)	CI3013	2	Fall/Spring
11.	Business Communication II. (English)	CI3014	2	Fall/Spring
12.	Hungarian language communication (beginner) I.	CM0013	2	Fall

General and Professional Foreign Language Courses (Optional) (Fall/Spring)

No.	Course name	Course description
1.	Foreign Language I. (English, German, 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, 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.

3.	Foreign Language III. (English, German, 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, 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.

5.	Foreign Language V. (English, German, 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, 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.
7.	Foreign Language VII. (English, German, 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.
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.





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 boundar 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' 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.	

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 technologies 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.
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, 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.	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. Input-output characteristics, load line and operating point. Amplifiers. Negative feedback in amplifiers and its effects. Integrated circuits. Operational amplifiers.
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.
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.
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. Flatleather 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 stude principles of finite element analysis and computational applications. Program discipline: Brief history of finite element Principles of variational calculus. va principles of mechanics. Principles of n methods. Stiffness equation of elements system. Types of finite elements. Comp applications.	nt knows d simple me of method. ariational jumerical s and a jutational
12.	Operation of Agricultural Machines	Goal: The aim of the course is to enable stumaster the theoretical background and questions of the operation of agricultural machines and implements, their applicates modern agricultural technologies. programme: Systematization of agricultural technologies. programme: Systematization of agricultural technologies. The technical, energetic and easpects of the compilation of machine. Operational power losses of machines, mereduces it. Tractor requirements, tractor cateristic of tractors. Consumption of power machine technical criterions of machine group's com Movement of field-machine groups. The ogravity and stability of agricultural mechanization plans. Functional machine operation of tillage machines, fertilization modern and planters, plant protection modern in field to production technology. machines system: operation of machines scereal grain production, maize production, reproduction, sugar beet production, modern systems.	udents to practical al power ability in Subject ricultural conomic groups. thods for tegories. curves of nes. The npilation. centre of iachines. systems: iachines, nachines, naticators anization Sectoral system of n, potato oughage enewable s of the



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.	Solfège – Music theory 1.	OEN2001	4	Fall
2.	Conducting practice 1. Conducting practice 3. Conducting practice 5. (depending on the level of the course)	OEN1103 OEN1115 OEN1128	2 2 2	Fall
3.	Choir 1.	OEN1104	2	Fall
4.	Piano 1.* Piano 3.* Piano 5.* (depending on the level of the course)	OEN1105 OEN1117 OEN1130	1 1 1	Fall
5.	Voice training 1.* Voice training 3.* Voice training 5.* (depending on the level of the course)	OEN1106 OEN1118 OEN1131	1 1 1	Fall
6.	Chamber music	OEN1142	2	Fall
7.	Consort singing 2.	OEN1150	2	Fall
8.	Musical computer science	ONZ1104	2	Fall
9.	Folk singing / folk instrument 2.*	ONZ1128	2	Fall
10.	LSP: Music Pedagogy (English) E-learning	CI3010	2	Fall
11.	European Trends in Pedagogy (English)	BA10058	4	Fall
12.	International Models of Integration and Inclusiveness (English)	BAI0059	4	Fall
*30-minute individual lesson				


Programme: Music (Fall)

No.	Course name	Course description
1.	Solfège – Music theory 1.	Acquiring the necessary knowledge and skills in the field of solfège and music theory to conduct Music lessons in schools, with special emphasis on relative solmization. The basic concepts in music theory, form and harmony. Characteristic features of musical sounds. Notation, key, interval, triad, scales, tonality, tonal systems, pillar of fifths / cycle of fifths, rhythm, rhythm patterns, types of beat. Motive, phrase, period. Classical tonal harmony and structure. Monophonic and polyphonic singing. Sight-singing, dictation, memorizing, transposition, musical notation, listening exercises, exercises with piano accompaniment. Child songs, folk songs. The principles of folk song analysis. Kodály's pedagogical works. Studying the material of Music textbooks to be found in the section on compulsory readings.
2.	Conducting practice 1. Conducting practice 3. Conducting practice 5. (depending on the level of the course)	Conducting practice 1. The objective of the course is to introduce students to conducting practice and making movements suitable to direct musical processes. Connecting music and movement. Developing the proper body- and arm positions. The technique of conducting, the mechanism of beat. Full and heavy sections of the rhythm. Types of simple rhythm. Simple techniques of stopping a musical sound (circling, beat). Conducting practice 3. Enlarging and developing the repertoire of directing tempo, character, dynamism and execution, and rendering it suitable to interpret musical processes in a professional way. Application of generic and stylistic knowledge pertaining to different periods in music history in conducting. Altering metres, parlando of shorter length. Getting to know works of rubato interpretation and of different tempo. Changes in tempo and dynamics without transition. Beat five and six. Samples from Baroque and contemporary works. Conducting practice 5. Enlarging and developing the repertoire of directing tempo, character, dynamism and execution, and rendering it suitable to interpret musical processes in a professional way. Application of generic and stylistic knowledge pertaining to different periods in music history in conducting to different periods in a professional way. Application of generic and stylistic knowledge pertaining to different periods in music history in conducting. Gregorian melodies. Divided measures, cadence divisions. 4/4 and alla breve subito transitions. Works with instrumental accompaniment: direction and co-operation. Performing cyclic compositions.

		Means of dramatic expression. Romantic formation (tempo, dynamics, agogics). Excerpts from Gregorian, Renaissance and Romantic music literature.
3.	Choir 1.	The course focuses on introducing students into the works of the universal and Hungarian choral literature, including a cappella pieces and ones with instrumental accompaniment. Special emphasis is laid on presenting and performing works of contemporary choral literature, and integrating them into the repertoire. In the course of enriching the students' musical knowledge and stage experience, the focus is on educating them for high-quality artistic work, as well as creating the feeling of joy through working together. Through the developed repertoire, attention to each other, education for musical adaptation, and the strengthening of socialization are also given space.
4.	Piano 1.* Piano 3.* Piano 5.* (depending on the level of the course)	 Piano 1.* Correct posture at the piano. The appropriate seat on the piano chair. Proper relaxation of the body before playing. Proper arm, wrist and finger posture. Proper physical cooperation with the mechanics of the piano. Basic elements of weight technique and proper touch in terms of the expected sound. Study material corresponding to the student's ability to read sheet music. Scale playing in octave strech in contrary motion and parallel, with two hands together. Developing of the independence of the hands, in terms of rhytmical and touch distinction, in two-part playing. Developing of chamber music skills and score-reading (sight reading) skills with easy 4-hands. Piano 3.* Building on the knowledge of OEN1211, the course focuses on creating awareness of it and reaching its automatic application. Further development of hand autonomy, awareness of melody and accompaniment. Practicing various accompaniment types including chords, broken chords, and walking accompaniment parallel with advancing knowledge of the functional order and harmony. Implementing the accompaniments of simple classical songs, according to song accompaniment material of the GCSE exam. Two-part Baroque polyphonic playing. Scale playing in 3-octave range, in parallel motion. Playing triads in 3-octave range in parallel motion, with two hands. Rapid one-page classical etudes. Melodic one-page etudes. Simple Viennese classical sonatinas. Romantic works of at least one or one and a half pages. Multi-movement or cyclic light 4-handed piano works. Conscious use of the damper pedal (right pedal) of the piano. Piano 5.* Building of the knowledge of OEN1224. Scale and triad playing in 4-octave range in octave-unison, sixth- and tenth intervals, in 4-octave range. Fast etudes (e.g., Czerny Op.299.), Fast-moving Bach two-part inventions, preludes, lighter Scarlatti sonatas, Couperin, Rameau, more difficult classical sonatinas (Mozart: 6 Viennese

		sonatinas), lighter Haydn-sonatas, Romantic pieces (Chopin's mazurkas, Mendelssohn's "Lied ohne Worte", etc.). Conscious use of embellishments. Conscious use of both pedals. More demanding 4-hand performance pieces focusing on both parts. Songs from the advanced GCSE material. Playing "Szózat" [Hungarian patriotic song played on ceremonial occasions]
5.	Voice training 1.* Voice training 3.* Voice training 5.* (depending on the level of the course)	Voice training 1.* Proper singing technique. Basic physiological and physical knowledge pertaining to speech and proper articulation of vocals. Voice training 3.* Correct breathing, automatizing attack. Developing resonance, strength of voice, range and solving the emerging problems. The changing of legato and non- legato, ornaments, simple passages in different musical styles. Orientation in different periods and styles. Voice training 5.* Works by early Italian, French and German masters. The songs of the main representatives of the Viennese Classicism and the expressive way of performing the compositions of the Romantic masters, the conscious inclusion of resonance. Baroque, Classicist, Romantic and 20th-century songs, airs and duets. Further development of singing technique in common music making.
6.	Chamber music	Instrumental, and possibly vocal ensemble performance of works from different music history periods. Getting to know the various instrumental ensembles through the diverse range of chamber music in music literature. Performing chamber music through playful, creative pieces.
7.	Consort singing 2.	The chamber singing repertoire of the national and international polyphonic vocal performing culture, mainly based on the works of the masters of the 20th and 21st centuries. Practical application of the acquired technical and theoretical knowledge in one per part vocal ensemble.
8.	Musical computer science	Students will be introduced to the possibilities offered by the Finale sheet music editing program as part of the course. Following the principle of setting problems into the centre, the knowledge to be acquired points from the reproduction of simpler sheet music to more complex tasks. The knowledge brought to the surface by the source documents introduces the student step by step to the main tools of the program.

9.	Folk singing / folk instrument 2.*	Folk singing:Thiscourse is familiarizethevocalmaterial of Hungarianfolkmusicinsystem of usage, insystem of landscape and historicaldivisionaswellasincontext of instrumentalmusic. Through th ematerialto be taughtduringthecourse, th estudentwillbecomefamiliarwithdifferentstyle of folk singing, thevocaltechnicknowledge (speech and soundtraining) and withdeveloping of performerabilitybecomescapable, inorder be a trainedmediator of folkculture, includingvocalfolkmusic, aswellasbecomescapabletodevelop of musical tastewithlearners and amateurgroupsthroughspecific musical activity. Zither: The course wishes to provide advanced training in different types of zither, presenting the historical background of the instrument family, while drawing students' attention to the characteristics of the zither playing of different dialect areas with such a complex approach that reveal the correspondences between vocal and instrumental melodies. This complexity is enhanced by a close relationship with the main subject "Folk singing". Folk flute: The course wishes to provide advanced training in different types of folk flutes, presenting the historical background of the instrument family, while drawing students' attention to the characteristics of folk flute playing of different types of folk flutes, presenting the historical background of the instrument family, while drawing students' attention to the characteristics of folk flute playing of different dialect areas with such a complex approach that reveal the correspondences between vocal and instrumental melodies. This complexity is enhanced by a close relationship with the main subject "Folk singing".
10.	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.

11. European Trends in Pedagogy (English)

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 (Spring)

No.	Course name	Course code	Credit	Semester
12.	Solfège – Music theory 2.	OEN1208	4	Spring
13.	Conducting practice 2. Conducting practice 4. Conducting practice 6. (depending on the level of the course)	OEN1209 OEN1222 OEN1234	2 2 2	Spring
14.	Choir 2.	OEN1210	2	Spring
15.	Piano 2.* Piano 4.* Piano 6.* (depending on the level of the course)	OEN1211 OEN1224 OEN1236	1 1 1	Spring
16.	Voice training 2.* Voice training 4.* Voice training 6.* (depending on the level of the course)	OEN1212 OEN1225 OEN1237	1 1 1	Spring
17.	Consort singing 1.	OEN1247	2	Spring
18.	Folk singing / folk instrument 3.*	ONZ1232	2	Spring
19.	LSP: Music Pedagogy (English) E-learning	CI3010	2	Spring
*30-minute individual lesson				

Programme: Music (Spring)

No.	Course name	Course description
12.	Solfège – Music theory 2.	Acquiring the necessary knowledge and skills in the field of solfège and music theory to conduct Music lessons in schools, with special emphasis on relative solmization. Ancient Greek tonal systems. The music of early Christianity and the Byzantine church. The concept of Gregorian chant, its origins and features (melismatic, neumatic and syllabic Gregorian melodies). Chants of the mass and hymns. Tropus and sequentia. Theoretical writers of the early Middle Ages. The work of Guido of Arezzo. The birth of note writing. The birth of early polyphony and its types in the 9-12th centuries: parallel organum, free organum, and melismatic organum. The vocal melodic world of Renaissance music. Its set of tones, modes, keys, harmonies, cadences, metre types, systems of notation, composition types, imitation types. The basics of counterpoint. The role of cantus firmus. Introduction to harmony: modal harmonies; the resolution of the dominant 7th chord. Monophonic and polyphonic singing. Sight-singing, dictation, memorizing, transposition, musical notation, listening exercises, exercises with piano accompaniment. Gregorian melodies and Renaissance polyphonic works. Folk songs, folk song analysis. Studying the material of Music textbooks to be found in the section on compulsory readings.
13.	Conducting practice 2. Conducting practice 4. Conducting practice 6. (depending on the level of the course)	Conducting practice 2. Mastering the repertoire of directing tempo, character, dynamism and execution. Application of generic and stylistic knowledge pertaining to different periods in music history in conducting. Avision at heavy and unstressed beats. Avision at incomplete sections of beat. Conveying rhythm in conducting movements (variations of elongated and sharp rhythm). Simultaneous beats. Conducting gradual tempo changes and dynamic changes. The individual role of the left hand. Conducting homophonous madrigals, villanellas, balettos. Folk song adaptations of 2-3 voices. Conducting practice 4. Enlarging and developing the repertoire of directing tempo, character, dynamism and execution, and rendering it suitable to interpret musical processes in a professional way. Application of generic and stylistic knowledge pertaining to different periods in music history in conducting. Basics of technique: pause, general pause, slurred note, sustained note. Conducting asymmetrical rhythms. Feeling of weight in works of different character. Conducting simple recitative. Samples from the period of Viennese Classicism. Compositions of contemporary and foreign poets' works set to music with more complex types of time signature and of varied musical content.

		Conducting practice 6. Enlarging and developing the repertoire of directing tempo, character, dynamism and execution, and rendering it suitable to interpret musical processes in a professional way. Application of generic and stylistic knowledge pertaining to different periods in music history in conducting. Preparation for directing school ensembles and child choirs. The questions of conducting extreme tempos. The stylistic features of 20th-century music; special effects. Choral compositions of contemporary composers. Problems of performing non-conventional notation. Aleatory compositions. non-conventional notation. Individual analysis and teaching of a freely-chosen work.
14.	Choir 2.	The course focuses on introducing students into the works of the universal and Hungarian choral literature, including a cappella pieces and ones with instrumental accompaniment. Special emphasis is laid on presenting and performing works of contemporary choral literature, and integrating them into the repertoire. In the course of enriching the students' musical knowledge and stage experience, the focus is on educating them for high-quality artistic work, as well as creating the feeling of joy through working together. Through the developed repertoire, attention to each other, education for musical adaptation, and the strengthening of socialization are also given space.
15.	Piano 2.* Piano 4.* Piano 6.* (depending on the level of the course)	Piano 2.* Building on the knowledge of OEN1105, creating its awareness and its automatic application. Improving the independence of hands. A combination of different articulations (legato-staccato) and combinations of basic movement forms of arms and fingers, associated to them. Implementing two types of articulation in one hand. Basics of articulation of Baroque and classical music, knowing its simple forms. The basic touch technique of easy Romantic piano pieces. The playing of cantabile. Focusing on forming of characters in character pieces. Further development of the musical expression. Deepening the use of the damper pedal. A two-hand scale playing in counter-movement and in parallel, in two octave range. Easy technical and melodic etudes. Chord accompaniment. Preparing rapid playing. Improving of chamber music and sight reading skills with easy 4-hand pieces. Piano 4.* Scale and triad playing in 4-octave range with two hands in unison. Chromatic scale in unison in 4 octaves. Double-page rapid etudes, light Baroque pieces (small preludes, dance movements, lighter Scarlatti sonatas, etc.), basic forms of Baroque embellishments, their execution and application. Light classical sonatinas, romantic and 20th century character pieces. Further development of the musical expression. Further deepening the use of the damper pedal, especially in case of lack of markings in the score. Playing both voices on balanced difficulty 4-hand scores, contributing to pedaling in the secondo position.

		Piano 6.* Building on the knowledge of OEN1130, deepening and automatising it. Scale and triad playing in 4-octave range in octave-unison, sixth- and tenth tone-distances. Chromatic scale in octave unison, third-, sixth- and decima tone distances, in 4 octaves range. Rapid etudes (ca. Czerny Op.299, Op.740), Additional Bach two-voice Inventions, preludes, easy fugues, 3- voicei inventions, larger Scarlatti sonatas, Couperin, Rameau, Daquin, moderately difficult Haydn sonatas, easy Mozart and Beethoven sonatas, Romantic performance pieces (Chopin preludes, valses, etc., Mendelssohn's "Lied ohne Worte", Schumann's "Kinderszenen", Tchaikovsky, etc.). Conscious use of decorations. Conscious use of both pedals. More demanding 4-handed performance pieces focused on both parts. Song accompaniments from the song material from the material of advanced GCSE. Playing the Hungarian National Anthem.
16.	Voice training 2.* Voice training 4.* Voice training 6.* (depending on the level of the course)	Voice training 2.* Developing the proper body posture, breathing and voice formulating techniques. Augmenting breath capacity through the practice of longer phrases, lyrics and lines from poems. Dynamic gradation, creating an awareness of crescendo-decrescendo. Voice training 4.* The characteristics of different stylistically determined periods, individual performing practice. Acquiring the necessary skills in different musical styles. Voice training 6.* Songs, airs and duets in the original language. Harmonising the lyrics and the musical expressions. Independent analysis of the melodic material and ideological content of the works. Stylistically proper, artistically developed and emotionally expressive performance.
17.	Consort singing 1.	The chamber singing repertoire of the national and international polyphonic vocal performing culture, mainly based on the works of the masters of the Renaissance age and those of Kodály and Bartók. The practical application of the acquired technical and theoretical knowledge in an one per part ensemble.
18.	Folk singing / folk instrument 3.*	Folk singing: This course is familiarizethevocalmaterial of Hungarianfolkmusicinsystem of usage, insystem of landscape and historicaldivisionaswellasincontext of instrumentalmusic. Through th ematerialto be taughtduringthecourse, th estudentwillbecomefamiliarwithdifferentstyle of folk singing, thevocaltechnicknowledge (speech and soundtraining) and withdeveloping of performerabilitybecomescapable, inorder be a trainedmediator of folkculture, includingvocalfolkmusic, aswellasbecomescapabletodevelop of musical tastewithlearners and amateurgroupsthroughspecific musical activity. Zither: The course wishes to provide advanced training in different types of zither, presenting the historical background of the instrument family, while drawing students' attention to the characteristics of the zither playing of different dialect areas with such a complex approach that reveal the correspondences between vocal and instrumental melodies. This complexity is enhanced by a close relationship with the main subject "Folk

		singing". Folk flute: The course wishes to provide advanced training in different types of folk flutes, presenting the historical background of the instrument family, while drawing students' attention to the characteristics of folk flute playing of different dialect areas with such a complex approach that reveal the correspondences between vocal and instrumental melodies. This complexity is enhanced by a close relationship with the main subject "Folk singing"	
19.	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.	

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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.	Inclusive Attitudes - Attitude shaping (English)	BCG2138	4	Fall
2.	Education of Children with Special Needs (English)	BCG2139	4	Fall
3.	Case Study	BCG2140	4	Fall
4.	LSP: Music Pedagogy (English) E-learning	CI3010	2	Fall
5.	Business Communication I. (English)	CI3013	2	Fall



Programme: Pedagogy (Fall)

No.	Course name	Course description
1.	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.
2.	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.

3.	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.
4.	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.

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.

Proc	iramme:	Social	Ped	adodv	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.	Education of Children with Special Needs	BCG2139	4	Fall			
5.	Inclusive Attitudes- Attitude shaping	BCG2137	3	Fall			

Programme: Social Pedagogy BA (Fall) **Course name Course description** Study of ethnically plural societies. Race, nation, ethnic group, Sociology of minorities. Minority - majority. Minority typology. Racism, Minorities 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. The concept of deviance and its relation to social norms. Social Deviances 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.

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.	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 development 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.	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.

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.

Proc	iramme:	Sport (Fall)

No.	Course name	Course code	Credit	Semester
1.	Theory and Practice Adapted Physical Education	BED1118	2	Fall
2.	Handball and Methods of Handball 1.	OTN1134	2	Fall
3.	Anatomy	BSR1117	3	Fall
4.	Business Communication I. (English)	CI3013	2	Fall

Programme: Sport (Fall)

No.	Course name	Course description
1.	Theory and Practice Adapted Physical Education	A broader and narrower interpretation of the concept of prevention. Longitudinal program for the prevention of musculoskeletal disorders in Hungary (program of the Society of Spinal Medicine). Development of biomechanically correct posture, theory and practice of joint and spine protection. Knowledge of the principle of equal opportunities. Development of preventive and health-conscious habits. The place and role of physical education in school. Types and degrees of locomotor disorders. Knowledge of contraindicated practices. Internal medicine categories, with special reference to obesity and asthma bronchial asthma. Workload in physiotherapy. The importance of applying relaxation.
2.	Handball and Methods of Handball 1.	The international and national history, origins and development of handball. Rules of the game and competition. Methodology of teaching the basic elements of handball and the importance of preparatory, lead-up and corrective exercises in teaching. The elements of the game to be learned, their application during the game (tactics), in accordance with the age characteristics, the developmental requirements of the individual posts and team play. The characteristics of goalkeeping. Acquisition of the necessary conditioning and coordination skills to execute ball-handling and ball-handling techniques. Acquisition of the basic techniques and tactical solutions necessary for the conduct of a typical game (defence-attack). Playing handball by manipulating the pitch, rules, number of players, characteristics, in order to achieve more effective training. Basic techniques, tactical solutions and participation of the attack.

3.	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.
8.	European Trends in Pedagogy (English, German)	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.

Pro	Programme: Sport (Spring)				
No.	Course name	Course code	Credit	Semester	
9.	Theory and Practice Adapted Physical Education (Prevention and Rehabilitation)	TNO1845	2	Spring	
10.	Adapted Physical Education and Methods	OTN1239	2	Spring	
11.	Theory and Practice Adapted Physical Education	BED1288	3	Spring	
12.	Theory and Methods of Phisiotherapy	BOV1223	3	Spring	
13.	Sport and Recreation Camps (Ski) – fee-paying	TNO1419 OTN1230	1	Spring	
14.	Tennis	TNO1035	2	Spring	

Programme: Sport (Spring)

No.	Course name	Course description
9.	Theory and Practice Adapted Physical Education (Prevention and Rehabilitation)	The course is about develop of biomechanical body posture. Give knowledges about some orthopedic and internal diseases. Students get information about aims and methods of Adapted physical education.After course the students have the skills help them take prevention exercises and games which secure the basic of the healthy lifestyle.Recognize the ortopedic deseases.Take the alternative option the treatment and solution of the prolems. Cooperate with the specialist, adapted physical education teacher and the parents.
10.	Adapted Physical Education and Methods	A broader and narrower interpretation of the concept of prevention. Longitudinal program for the prevention of musculoskeletal disorders in Hungary (program of the Society of Spinal Medicine). Development of biomechanically correct posture, theory and practice of joint and spine protection. Knowledge of the principle of equal opportunities. Development of preventive and health-conscious habits. The place and role of physical education in school. Types and degrees of locomotor disorders. Knowledge of contraindicated practices. Internal medicine categories, with special reference to obesity and asthma bronchial asthma. Workload in physiotherapy. The importance of applying relaxation
11.	Theory and Practice Adapted Physical Education	A broader and narrower interpretation of the concept of prevention. Longitudinal program for the prevention of musculoskeletal disorders in Hungary (program of the Society of Spinal Medicine). Development of biomechanically correct posture, theory and practice of joint and spine protection. Knowledge of the principle of equal opportunities. Development of preventive and health-conscious habits. The place and role of physical education in school. Types and degrees of locomotor disorders. Knowledge of contraindicated practices. Internal medicine categories, with special reference to obesity and asthma bronchial asthma. Workload in physiotherapy. The importance of applying relaxation.

12.	Theory and Methods of Phisiotherapy	The concept of prevention in a broader and narrower sense. The longitudinal program of the prevention of locomotor disorders in Hungary (Program of Hungarian Spine Medicine Association). correction exercises and the Adapted Physical Education games of the diseases. Developing a biomechanical body posture, the theory and methods of joints and spine protection. Awareness of the principle of equal opportunities. Shaping preventive and health-conscious habits. Give information about contraindicate exercises. Tasks and place of Adapted Physical Education in pre- school education. Types and degrees of locomotor diseases. Knowledge of containdicated excercises. Internal diseases with special regard to Obesity and Bronchial Asthma, which are considered to be current endemics. Physical training in Adapted Physical Education. The significance of the application of relaxation excercises.
13.	Sport and Recreation Camps (Ski) – <i>Fee-</i> <i>Paying</i>	The way to wear the skis, attach the skis. Exercises to get used to skiing in place and with progress, games. Alpine skiing basic school: straight glide, snow glide, snow glide: rotation, load change, pressure change, sharpening, cross glide, turn towards the mountain, supported turn, dynamic supported turn, stop turn, parallel turns.
14.	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.

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.

Pro	Programme: Visual Art (Fall)				
No.	Course name	Course code	Credit	Semester	
1.	Let's 'C' Art talk I.	-		Fall	
2.	Basics of drawing	-		Fall	
3.	Contemporary painting and graphic arts I.	BKA2135	4	Fall	
4.	Marketing	BAI0057	5	Fall	
5.	LSP: Music Pedagogy (English) E-learning	CI3010	2	Fall	
6.	Business Communication (English, German, French, Russian)	BAI0052	4	Fall	
7.	Environment and Sustainability	BAI0050	4	Fall	
8.	Business Communication I. (English)	CI3013	2	Fall	

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Programme: Visual Art (Fall) Course name Course description Contemporary visual art phenomena are often provocative, Let's 'C' Art talk I. pushing the boundaries of "good taste" and sometimes even crossing them. That is why it is important, whether for it or against it, to clash arguments with arguments, to provoke a debate, during which debate we definitely get closer to understanding contemporary art. In the everexpanding program, we gather the world's best-known and most important visual artists. It is very important that we are not interested in what others say about artists and works of art, but what the artists themselves say about themselves and their art. We are negotiating about Art against politics in the Chinese Ai Weiwei's forbidden art. Figurative Sculpture Reloaded - The Self-Centered Art of Antony Gormley. I will laugh at death if I have to! Provocation or just mockery, art of the Chapman Brothers. The other titles of the program are: Tattooed pigs, twisted cathedrals - Wim Delvoye. Portuguese feeling of life in London - Paula Rego. The purpose of the subject is that those students who do Basics of drawing not study at the Institute of Visual Culture, but are interested in drawing, they can get a taste of the basics of drawing during the semester achieve success. Practicing and learning of drawing helps in other directions and elsewhere also can evolve other useful thinkings as well. Disciplined line drawing is the development of spatial perception its practice is also useful in other areas of life. We also welcome all students from other institutes as well! Every students are welcome whom are interested in practicing drawing. By the end of the semester, students will be able to use drawing tools through to the perception of space, to drawing a still life and an interior. They practice a clear lines, the display of light and shadow on the paper. Finally, black and white painting as a complement to the drawing. While the pencil, chalk and charcoal drawing can be erased, i.e. corrected, the ballpoint pen drawing it requires a steady hand, there is no possibility of erasing. Among other things, also for this sure drawing skill we try to prepare the students. The subject presents the knowledge of the pre-art art history Contemporary courses in the second half of the 20th century. The main painting and artistic/painting trends, their most important characteristics, graphic arts I. 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. 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.
4.	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-PromotionPeople-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 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.

5.	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.
6.	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.
7.	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.
8.	Business Communication I. (English)	-




Programme: Visual Art (Spring)				
No.	Course name	Course code	Credit	Semester
1.	Let's 'C' Art talk II.	-		Spring
2.	Art Creation II.	BKA2221	5	Spring
3.	Art Creation IV.	VKO1022	3	Spring
4.	Drawing studies II.	BKA2224	6	Spring
5.	Drawing studies IV.	BKA2226	6	Spring
6.	Basic plastic exercises	KAB2005	2	Spring
7.	Creative process II.	VKO1016	5	Spring
8.	Contemporary painting and graphic arts II.	BKA2236	4	Spring
9.	LSP: Music Pedagogy (English) E-learning	CI3010	2	Spring

Programme: Visual Art (Spring)			
No.	Course name	Course description	
1.	Let's 'C' Art talk II.	The subject is primarily intended for Erasmus students, and others whom understand English, whom are studying English, whom are preparing for a language exam, and interested in contemporary art, and love art subjects. In portrait films, we present the world's most significant contemporary visual artists and artistic trends. Each film screenings are followed by a discussion. In the course we introduce the use of pigments and reflections according the Indian born British artist Anish Kapoor. We discuss the exhibition titled "Seven Heavenly Towers" by the German artist, Anselm Kiefer. We talk about the "vibrantly coloured dots on the edge of madness" - the Japanese Yayoi Kusama's art. The other titles of the program are: Giant spiders by Louise Bourgeois. Northern Lights - Olafur Eliasson. U-ram Choe, Korean Artist, Self-Taught Robotics in Sculpture. Nature Art by Andy Goldworthy.	
2.	Art 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-colourcolourless, 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.	

3.	Art Creation IV.	Our aim is to get to know the language of plasticity, the plastic forms. Through the observation of the live model, the proportions, those spatial directions are the observation and shaping of the structure. Getting to know the role of light and shadow in plastic arts and using them consciously. An overview of the most important art historical examples of sculpture and their analysis from a professional perspective. Learning and practicing some simple sculpting techniques. Modeling of clay, plasticine and casting plaster. Preparation of a terracotta statue. Art analysis: overview and professional analysis of the most important historical and art historical examples of sculpture. Finding artistique solutions in sculpture like: -the rhythm, - proportion, - the dynamism, - and the balance. The goal is to get to know and master the tool system of style, aesthetics, and basic effectiveness. Getting to know the basic materials and tools of the sculpting workshop, getting to know basic occupational health and safety information. The preparation of the armature of a portrait, and placing the clay on it. Careful determination of the proportions of the head sculpture, knowledge of the axes of the head sculpture. Making the plaster negative mold and then cast the plaster positive of the statue. Retouching of the casting seams and defects of the statue, development of the final surface.
4.	Drawing studies II.	The primary aim is the sculptural representation of the human head and body. Through that our spatial vision and spatial thinking developing as well. We are learning different sculpting techniques, in addition to the use of available materials, that leads confident proficiency in other areas of design and shape creation as well. Making a wire sculpture. By using the metal wire, the spatial relationships of the forms become visible and interpretable. Making of a clay portrait. Primarily, we arrive at the creation of a realistic sculpture portrait by defining and shaping the proportions and structural relationships of the human head. Depending on your individual interest, we can also practice the implementation of different contemporary styles and form experiments.
5.	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.
6.	Basic plastic exercises	The primary aim is the sculptural representation of the human head and body. Through that our spatial vision and spatial thinking developing as well. We are learning different sculpting techniques, in addition to the use of available materials, that leads confident proficiency in other areas of design and shape creation as well. Making a wire sculpture. By using the metal wire, the spatial relationships of the forms become visible and interpretable. Making of a clay portrait. Primarily, we arrive at the creation of a realistic sculpture portrait by defining and shaping the proportions and structural relationships of the human head. Depending on your individual interest, we can also practice the implementation of different contemporary styles and form experiments.
7.	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.

8.	Contemporary painting and graphic arts 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-GulácsyCsontváry-Vajda line). The domestic classical avantgarde 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 (lparterv 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.). Discovering the genres of contemporary graphics, exploring the genres of the print. New Media Graphics 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.
9.	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 study autonomously.







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Article 1



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Erasmus+ Complete Guide

The City of Nyíregyháza and The University of Nyíregyháza