

Transilvania University of Braşov, Romania

Study program: Engineering and Management in Tourism Industry

Faculty: Food and Tourism

Study period: 4 years (bachelor)

1st Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Mathematics	MAT	5	2	2		

Course description (Syllabus): elementary functions. analytic geometry; vector calculation; sequences and series of real numbers; definitions; convergence of sequences; series with nonnegative terms; absolute convergence; alternating series; functions of a real variable; limit of a function; derivative of a function; functions of several real variables; functions of two variables (limits. continuity); partial derivatives; maximum and minimum values of functions; definite integrals;

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physics	FIZ	5	2		2	

Course description (Syllabus): physics fundamentals; climatology; introduction; the atmosphere; the physical basis of climate; genetic factors of climate; weather and climate; weather and climate information in tourism; climatography; climate classifications; weather changes; climatic resources on the Romanian territory.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Chemistry	CHIM	4	2	1	1	

Course description (Syllabus): General concepts of chemistry (atom, molecule, mole equivalent), Chemical compound. Oxides, acid, base and salt, Water. Molecular and colloidal disperse systems (ebulioscopia, freezing electrolytic dissociation, pH, hydrolysis, buffer systems, Electrolysis of melts and solutions, Macromolecular compounds. Composite materials. Glass

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
EU Institutions, mechanisms and terminologies	IMTC	3	2	1		

Course description (Syllabus): European Union, European Parliament, European Council, European Commission, Court of Justice, Council of the European Union, European Treaties, Common Agricultural Policy, Justice and Fundamental Rights, Regional Policy, Taxation, Single Market, Co-decision, Foreign and Security Policy, Committee of Permanent Representatives, European Central Bank, European Court of Auditors, Eurogroup, EUROPOL, EUROJUST.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Computer programming and programming languages I	PCLP I	5	3		2	

Course description (Syllabus): main hardware and software computer components; operating systems; peripherals; specific software applications for food industry; web browsing.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Tourism basics	BT	5	2	2		

Course description (Syllabus): the concepts of tourism and tourist; history of tourism; forms of tourism; costs and benefits of tourism; tourism dimensions; tourism demand and tourism offer; tourist motivation models; tourism statistics; tourism management; career opportunities in tourism; tourism in the third millennium.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Tourism geography	GT	5	2	2		

Course description (Syllabus): the definition of tourism and its evolution; the touristic resources; the touristic infrastructure; the main types and forms of tourism; the major touristic regions of the world; the main touristic regions in Romania.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
European economic policies	PEE	5	2	1		

Course description (Syllabus): European legislation; European policy; European Commission; main European economic policies affecting tourism; European policies for tourism; the most recent European tourism policy: main directions and implementation at country level; case studies.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Computer-aided design	GAC	4	2		2	

Course description (Syllabus): The course aims to familiarize students with the fundamental notions of technical drawing but also with the application in drawing using AUTOCAD

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Theory of probabilities and mathematical statistics	TPSM	4	2	2		

Course description (Syllabus): probability, conditional probability, probabilistic schemas; random variables, mean, variance, moments; probability distributions; sampling theory; estimation theory; confidence intervals; statistical hypothesis testing.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Computer programming and programming languages II	PCLP II	5	2	1	3	

Course description (Syllabus): classification of programming languages; algorithms; c++ programming languages. types of data; main commands and instructions; data matrix; strings; algorithms for string sorting; algorithms for data matrix; examples for main programming structure used in tourism industry.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Ecology and environmental protection	EPM	5	2		2	

Course description (Syllabus): ecology, environmental engineering and human activity; ecology principles and application in tourism and hospitality industry; the structure and functions of ecosystems; agro ecosystems; pollution and population sources in agro tourist ecosystems; environmental protection in the field of agriculture – food industry – tourism.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Spanish language	LS01/LS02	2	1	1		

Course description (Syllabus): Spanish for specific purposes; understanding and using specific commercial language; Spanish for tourism; business letters; specific grammar issues in Spanish for specific purposes.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
English language	LE01/LE02	2	1	1		

Course description (Syllabus): travel agencies and tour operators; a career in tourism; trends in tourism; where people go; travel agents; responsible tourism, promoting a destination; hotel facilities; things to do; marketing the past; business travel; service and safety.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
German language	LG01/LG02	2	1	1		

Course description (Syllabus): basic structures, such as presenting oneself, speaking about hobbies, about one can like or dislike; the present tense of the verbs but also the past tense for expressing events which still took place; compounding nouns and practice of phonetics for a good pronunciation (long and short vocals, diphthongs, etc.); forming simple sentences and questions respecting the word sequences; vocabulary around salutations, hobbies, daily activities, food and drinks, vehicles for travelling in town and out of it; famous touristic places in Germany such as Hamburg, Bremen, Berlin, Munich, Bavaria or Cologne; practice of listening, reading, writing and speaking skills, so that the students can express themselves in simple conversations; extended grammar terms such as the accusative, prepositions, the article and the modal verbs.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
French language	LF01/LF02	2	1	1		

Course description (Syllabus): The course is aimed at consolidating and improving knowledge of French grammar.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Academic writing	SA	1	1			

Course description (Syllabus): Academic writing: text, discourse writer, reader. Importance of ethics in scientific research, Drawing the reader's attention; Paraphrasing texts; Academic structures used in scientific texts I, Citing and combining cited sources; Academic structures used in scientific texts II, Organizing texts, extracting information, writing abstracts; Academic structures used in scientific texts III, Identifying sources to write scientific texts.; Using databases; Academic structures used in scientific texts IV, Writing references. Common referencing styles; Academic structures used in scientific texts, Writing academic texts (technical reports, instructions, procedures, manuals); Academic structures used in scientific texts.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Sports	EF01/EF02	1		1		

Course description (Syllabus): group sports, improvement of students physical condition.

2nd Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Introduction to economics	BE	5	3	2		

Course description (Syllabus): fundamentals of economic activities; demand, offer, market and competition; labor market, unemployment, salaries; money market, inflation, credits and interests; capital market; fundamentals of macroeconomics; international economic relations and European Union (EU) economic integration.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Introduction to management	BM	5	2	2		

Course description (Syllabus): elements of scientific management; politics and strategies in management; organizational structures and important documents in management; operational techniques in management; development of management.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Quality management	MC	5	2			2

Course description (Syllabus): The aim of the discipline "Quality Management" is to provide students the opportunity to learn the main purpose of the concept of Quality Management, supplemented with the signification of each term related to quality and management. Also, by learning to operate with this terms, it is going to be easier to distinguish between quality and management and to create a connection between them. Quality management ensures that an organization, product or service is consistent. Quality management is focused not only on product and service quality, but also on the means to achieve it. Quality management, therefore, uses quality assurance and control of processes as well as products to achieve more consistent quality. What a customer wants and is willing to pay for it determines quality. It is a written or unwritten commitment to a known or unknown consumer in the market. Thus, quality can be defined as fitness for intended use or, in other words, how well the product performs its intended function. The discipline is exposed in an attractive and interactive manner, becoming easier to be assumed by the students and the project classes complete the theoretical notions with practical approach.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Logistics of tourism systems	LST	5	2	2		

Course description (Syllabus): This one-semester course is designed for every day activity in all types of food and accommodation establishments. The seminar work is used to illustrate some of the concepts covered in the courses and lectures.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Food raw materials	MPA	4	2		2	

Course description (Syllabus): The purpose of the discipline "Food raw materials" is to describe and characterize the food raw materials (plant and animal origin) which will be subjected to a specific technological process in order to transform them into finished or semi-products. The food industry is noted for the multitude of raw materials processed and the diversity of the finished products, which requires the existence of various technological processes. The raw materials, for the most part, are biological in nature, perishable and degradable, which requires seasonal processing, at a certain rate of production and under certain working conditions. If most industries process raw materials that generally have constant characteristics, the food industry processes products with inhomogeneous physical, chemical and biochemical characteristics, which necessitates an occasional change in production parameters.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Managerial communication	CM	4	2	2		

Course description (Syllabus): Managerial communication in tourism industry. Internal and external managerial communication. Communication competences. Case studies. Debating. Understanding the process of managerial communication: climate, contexts, participants. Understanding and managing messages. Communication, as interpersonal relationship. Communication within groups. Managing meetings and teams. Planning, organizing and making presentations. Nonverbal communication. Creative communication in tourism. Creative tourism management. Intercultural communication. Cultural values. Cultural influences upon the process of communication. Barriers in communications: stereotypes and attitudes. Leadership and communication. Crisis communication. Interpersonal conflicts. The role of communication in preventing and resolving conflicts. External conflicts. Customer relationships.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Applied computing	IA	4	2		2	

Course description (Syllabus): Utilization of advanced editing and development of digital images to be used in tourism activities.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Tourism and regional planning	ATT	4	2			1

Course description (Syllabus): The course analyses the factors that influence the spatial planning of the territory at a Global level as well as several ways that planning has adapted to the geographical and cultural factors, during several case studies. Environmental protection constitutes a priority objective for territorial planning as shown in case studies from, Indonesia, and the U.S.A, with special care for national parks and mountain resorts.

Accommodation units with minimal environmental impact are also tackled during this course with case studies from Brazil, Ecuador, Peru and Chile.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Equipment and installations for hotels and restaurants	IEHR	4	2		1	1

Course description (Syllabus): Ventilation and air conditioning installations for hotel and restaurants; heating systems for hotels and restaurants; refrigerators for hotels and restaurants; equipment for kitchens; restaurant and bar equipment; installations and equipment for the accommodation; installations and equipment for cleaning maintenance.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Accountancy	CON	4	2	1		2

Course description (Syllabus): accountancy object and method; main financial- accountancy statements; accountancy of capitals; accountancy of assets; accountancy of stocks; accountancy of treasury; accountancy of settlements with third parties; accountancy of expenses and revenues; balance-sheet; costs accounting.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Human resources management	MRU	4	2	2		

Course description (Syllabus): Human resources management – basic principles; Organisational structures design; Leadership in organisations; Motivation theory; Payment systems; Strategic human resources management; Industrial

relationship management; Stress management; Communication management; Economical appraisal of the human resources performances.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Commercial law	LC	4	2	2		

Course description (Syllabus): features of commercial law; sources of commercial; acts of trade, commercial law topics; commercial companies; offenses under special laws governing the trade; auxiliaries trade; competition in business; trade obligations; special commercial contracts; credit titles.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
English language	LE03/LE04	2	1	1		

Course description (Syllabus): careers in tourism; destinations; hotel facilities; tour operators; dealing with guests; travel agencies, seeing the sights; getting around; eating out; traditions; special interest tours; the front office.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Spanish language	LS03/LS04	2	1	1		

Course description (Syllabus): Spanish for Specific Purposes; Understanding and using specific language; Spanish for tourism and food industry; commercial correspondence; Specific grammar issues in Spanish for Specific Purposes.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
German language	LG03/LG04	2	1	1		

Course description (Syllabus): basic structures, such as presenting oneself, speaking about hobbies, about one can like or dislike; the present tense of the verbs but also the past tense for expressing events which still took place; compounding nouns and practice of phonetics for a good pronunciation (long and short vocals, diphthongs, etc.); forming simple sentences and questions respecting the word sequences; vocabulary around salutations, hobbies, daily activities, food and drinks, vehicles for travelling in town and out of it; famous touristic places in Germany such as Hamburg, Bremen, Berlin, Munich, Bavaria or Cologne; practice of listening, reading, writing and speaking skills, so that the students can express themselves in simple conversations.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
French language	LF 03/LF04	2	1	1		

Course description (Syllabus): The course is aimed at revising and then at continuing the process of consolidation and improvement of French grammar knowledge that began in the first year of study.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Sports	EF03/EF04	1		1		

Course description (Syllabus): group sports, improvement of students physical condition.

3rd Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Macroeconomic policies in tourism	PMT	5	2	1		

Course description (Syllabus): macroeconomic guidelines; the objectives and the typology of macroeconomic policies; the effects of tourism on the economy; international and Romanian organizations and institutions of tourist policy; tourism macroeconomic policies, strategies, actions and measures in the UE and Romanian; corporate policy of hotel chains.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Equipment for entertainment in tourism industry	IAT	5	2		2	-

Course description (Syllabus): identification of products and recreation equipment; leisure products and equipment by venue; winter, summer and permanent recreation; ensure consumer protection and environmental; legislation and rules ntsm, psi.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Food safety and consumer protection	SAPC	4	2		2	

Course description (Syllabus): Veterinary sanitary legislation on food and feed safety, Veterinary health control of products regarding food safety, General hygiene procedures, Implementation of HACCP; Systems to ensure food safety through HACCP management, National and international legislation specific HACCP; Inspection guides, Risks of food contamination (mycotoxins, heavy metals, pesticides, veterinary drug residues in food), Bacteria with pathogenic risk to humans

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Hotel – economy and management	HEM	4	2	2		

Course description (Syllabus): This one-semester course is designed for every day activity in hotels. The seminar work is used to illustrate some of the concepts covered in the courses and lectures.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Methods and techniques to obtain food products	MTOPA	4	2		2	

Course description (Syllabus): Vineyards and type of wines; General considerations on grape varieties used for wines production; The technology of obtaining white, red and aromatic wines; The production and the description of special wines: wines for dessert, sparkling and flavoured wines; Physicochemical characteristics and sensory of the main types of wines; The obtaining and the characteristics of spirituous distilled drinks; Definition, beers classification, nutritional value and the physiological action of beer. Technological schemes of obtaining blonde and stout beer.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Tourism marketing	MKT	4	2	1		

Course description (Syllabus): tourism and hospitality marketing – general issues (the marketing environment, SWOT analysis); the four Ps; the tourism product; branding/rebranding tourist products; promotion techniques in tourism and hospitality; price policy and strategies in tourism; the tourism market; tourist market segmentation; research methods in tourism marketing; consumer behavior in tourism; profiling tourists/guests (the generational theory).

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Culinary techniques and pastry products	TCP	4	2		1	1

Course description (Syllabus): Generalities regarding culinary technologies; Operations that make up the culinary technological flows; General technologies for obtaining culinary products; Raw and auxiliaries materials used in culinary production; Techniques for preparing liquid culinary products; Techniques for making steaks; Techniques for making sauces; Obtaining culinary semi-products; Obtaining culinary products from vegetables and / or meat; Pastry processing techniques.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Information systems applied in management	SIM	4	2		2	

Course description (Syllabus): domotic systems in tourism industry; global positioning system; geographical information system; medallion; web page design in tourism industry.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Transport systems in tourism industry	STIT	3	2			2

Course description (Syllabus): transport; direct and combined transport; main parameters of the vehicle; general organization of motor vehicles; basic parameters of vehicles; transport vehicles for persons; equipment for mountain, water and cable lifts; pipeline; safety standards and fire prevention.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Management of the travel agency	MAT	3	2	2		

Course description (Syllabus): The management system functions in the tourism sector; Modern methods of management of the companies of tourism; Decision-making system; Travel agency- Economic agent distinct; Technical operations and the organization travel agencies

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Services and public utilities	SUT	4	2	2		

Course description (Syllabus): Public administration, Public utilities, Public institutions, State central public institutions, Government, Local public utilities, Education services, Services for emergency situations, Evidence of population, Health care services, Welfare services, Architecture and Engineering Services, Public libraries, Public transport, Sanitation, Waste disposal services, relationship between central public bodies and local bodies.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Investment management	MI	4	2	1		

Course description (Syllabus): The discipline ensures the information and training of the students in the complex issue of the decision-making mechanisms in the sphere of economic activities management. The discipline presents the process of technical and economic substantiation of the decision to invest, together with the presentation of the main types of strategic approaches regarding the financial management of the company.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Legislation in tourism industry	LDIT	4	2	2		

Course description (Syllabus): Tourism legislation and regulation; regulation of the tourism industry determining the rights and obligations of the industry suppliers; regulation of the tourism industry determining the rights and

obligations of the tourists consumers; authorization and classification guidelines of tourism facilities, of travel agencies and tour operators, of touristic ski slopes and mountain trails, of touristic beaches, of touristic water sports; attestation guidelines of tourism guides.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Tourism planning	AT	4	2	2		

Course description (Syllabus): tourism regulation for rural areas, the rural destination, planning stakeholders for rural destinations, agritourism

4th Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Tourism constructions, development and elements of architecture	CTMEA	5	2			2

Course description (Syllabus): The course has two main parts. In the first one aims to present some basic elements and notions related to architecture history and its vocabulary. At the second one introduces the main building components, in terms of materials and structure, focusing on touristic constructions.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Economic-financial analysis	AEF	5	2	1		1

Course description (Syllabus): economic and financial diagnosis; enterprise performance evaluation; diagnosis of economic growth; diagnosis of profitability; diagnosis of financial balance; business risk diagnosis.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Gastronomic engineering	IG	5	2		2	2

Course description (Syllabus): definition of gastronomic engineering; the conceptual bases of gastronomic engineering; evolution of gastronomic techniques; elements of operational management; culinary production.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Management of food enterprises	MUAP	5	2	2		

Course description (Syllabus): setting up for breakfast, lunch and dinner; setting up for à la carte serving or banquet; preparing food product and beverage lists. menus; waiting on tables - rules of conduct to be observed by the restaurant attending staff; handling, transport and relieving serving inventory items. general rules of working in a restaurant; serving techniques used in restaurants. stages of the work in a restaurant; rules to follow when serving the main types of food, confectionary and pastry products; particularities of serving certain dishes. attending groups of tourists; serving drinks in the restaurant lounge – matching drinks and food products; wine tasting, preserving, serving and decanting; food preferences of romanian and foreign tourists; preparing cocktails and bar services, impact of catering services on the life style in the modern community; catering industry structure and characteristics of catering units; classification of catering products. starting materials/half finished products of the industrial catering; classic catering production system and centralized production derivative systems; equipment, tools and specific facilities; catering food safety principles; catering marketing principles; ethical principles of the catering profession.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Management of tourist reception structures	MSPT	5	2	2		

Course description (Syllabus): This one-semester course is designed for learning how to manage an accommodation business, on different levels of activity, from start up activities to specific issues. The seminar is used to illustrate some of the concepts covered in the courses and lectures, using case studies.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Organizing tour guide activities	OAGT	3	2			2

Course description (Syllabus): Tourist potential, Systems of attestation of guides in tourism, Technical activity of travel agent guide, The consumer tourist services- coparticipant to the achievement of benefit tourism.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Negotiation techniques in tourism	EMIT	4	2	2		

Course description (Syllabus): This one-semester course is designed for every the present context, where online activity and platforms are of vital importance in tourism and hospitality industries.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Psychology and behavior studies	PSC	4	2	2		

Course description (Syllabus): Tourists behavior profiles, tourist market segmentation techniques and variables, tourists personality traits, tourism employees profiles, generational profiles in tourism and hospitality, the generational gap in tourism and hospitality.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Tourist products	PT	3	2	1		

Course description (Syllabus): definition of the tourist product, classification of tourist products, the product lifecycle, product related strategies in tourism.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Sustainable development and ecotourism	DDE	4	2	1		

Course description (Syllabus): rural tourism and agri-tourism in EU; rural tourism and agri-tourism in Romania; sustainable development of tourism; mountain ecotourism; Danube and Danube Delta ecotourism.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Techniques for optimizing the processes in the tourism industry	TOPIT	4	2	2		

Course description (Syllabus): The course aims to familiarize students with the techniques that optimize tourism processes with direct impact on improving the quality of tourism services

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Modeling and simulation of tourism activities	MSAT	5	2		2	

Course description (Syllabus): Develop the capacity to design and simulate and present activities and facilities in tourism industry.