Transilvania University of Braşov, Romania

Study program: Engineering and Business Management

Faculty Technological Engineering and Industrial Management
Study period 4 years (bachelor)

1st Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Calculus	CAL	5	2	2	-	-

Course description (Syllabus): numeric series; derivate and differentials; extreme points; integrals; surface and volume integrals.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physics	PH	4	2	-	2	-

Course description (Syllabus): basic of classical mechanics; oscillatory movement; relativity theory; elastic wave; thermodynamics; electromagnetism; optics; quantic mechanics; atomic physics; solid physics; nuclear physics.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Chemistry	CH	5	2	-	2	-

Course description (Syllabus): principles of chemistry science; atom characteristics; physical and chemistry bonding; chemical transformation and aggregation states of substances; water; electrolytes; metals; metals and alloys; corrosion; inorganic polymeric materials (glass and ceramics) and organic (polymers of polyaddition and polycondensation); composites.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Applied software	AS	4	2	-	2	-

Course description (Syllabus): data structures and algorithms in programming for economic applications; operating systems; text processing: text formatting; tables; equations; pictures and images (Microsoft Word); text processing: create standard documents for business field; spreadsheet: data inputs; sheet formatting; formulas; diagrams (Microsoft Excel); business applications.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Managerial communication	MC	5	2	2	-	-

Course description (Syllabus): structure of communication processes; theories and models of communications; individual and organizational communication in social environment; oral communications; communication in social and public environment of companies; recruitment communications; meeting management; conflict settling; research techniques in scientific, economic, administrative;information resources; data bases.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Law	LA	2	1	1	-	-

Course description (Syllabus): the concept of law; sources of law; action in time and space law; legal norms; interpretation of legal norms; legal relations.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Ethics and Academic Integrity	EAI	2	1	1	-	-

Course description (Syllabus): the mission and objectives of the study program; the competencies provided by the program; regulations for the organization of studies; the role of disciplines in the curriculum; documenting at the library; labor market opportunities, academic writing.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physical Education and Sports 1	PES1	1	-	1	-	-

Course description (Syllabus): practical skills training-methodical composition of complex aerobics; analytical exercises for upper limbs and scapular-humeral belt; exercises for trunk and abdominal muscle; individual actions specific basketball game in attack and defence; elementary collective tactical combinations in attack and defence in basketball; bilateral game.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Computer programming and programming languages	CPPL	4	2	-	2	-

Course description (Syllabus): interface of object-oriented programming environment (Delphi); object manager; forms: properties and events; component toolbars; component management; *Button, BitBtn, Edit, Memo, CheckBox, MainMenu, ToolBar* components; dynamic programming; multiforms applications.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Technical Drawing	TD	5	2	-	3	-

Course description (Syllabus): line and plan drawing; relative position of two planes; intersecting and parallel planes; methods applied in descriptive geometry; polyhedrons and rotation surfaces; bodies intersections; multiview drawing (view, projection, etc.); views, sections and breaks representation; dimensioning in technical drawing; tolerances and precision; drawing and dimensioning: threads, grooved wedge and grooves, gears; assembly drawing.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Materials science and engineering	MSE	3	1	-	2	-

Course description (Syllabus): structure and properties of metallic materials; **alloys** theory, man type of equilibrium diagrams; Fe-C alloys; thermophysical and thermochemical treatments for steels; alloyed steels; non-ferrous alloys; extractive metallurgy; moulding, plastic processing; metals welding.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
General Economics	EG	5	2	2	-	-

Course description (Syllabus): demand, offer, market, concurrency; labour market, employment, unemployment, wages; monetary market, inflation, loan and interest; capital market; macroeconomics; international economic relations.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Linear algebra, analytical and differential geometry	LAADG	5	2	2	-	-

Course description (Syllabus): Linear algebra: vector spaces and subspaces; Euclidian spaces; free vector; vector product; linear transformation in vector spaces; eigenvalues and eigenvectors; diagonalization; liner, bilinear and quadratic forms. Analytic geometry: plan and lines in space; angles; cons; canonical form; quadrics. Differential geometry: plane curves; oscillate circle; tangent; normal; Frenet marker elements; surfaces (generalities; conics; cylindrical, etc.).

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Mechanics	MEC	5	2	1	1	-

Course description (Syllabus): Statics: material point; rigid; rigid systems; application in engineering. Kinematics: point; rigid; relative movement; application in engineering. Dynamics: theorems; rigid solids.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physical Education and Sports 2	PES 2	1	-	1	-	-

Course description (Syllabus): Football: playing without ball; foot hitting; head hitting; strategies. Basketball: techniques; tactical offensive and defensive; contra-offensive; bilateral game.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
English language 1a	EL1a	2	1	1	-	-

Course description (Syllabus): Verb: mood, tense and aspect; indicative mood – present; indicative mood – past; indicative mood – future; modals; Noun: classification, gender, number, case; Adjective: classification, comparison, special constructions, position.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
French language 1b	FL1b	2	1	1	-	-

Course description (Syllabus): Verb: mood, tense and aspect; indicative mood – present; indicative mood – past; indicative mood – future; modals; Noun: classification, gender, number, case; Adjective: classification, comparison, special constructions, position.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
English language 2a	EL2a	2	1	1	-	-

Course description (Syllabus): word order (in declarative/ interrogative/ imperative/ exclamatory sentences); sequence of tenses; reported speech; inversion; negation; complex sentences.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
French language 2b	FL2b	2	1	1	-	-

Course description (Syllabus): pronoun; adverbs; preposition; communication skills.

2nd Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Numerical methods	NM	4	2	-	2	-

Course description (Syllabus): mathematical software: Matlab, Mathematica, Maple, Mathcad; introduction in Mathcad; Mathcad programming; vectors and matrixes; numeric solution of equations and equations system; optimizations: nonlinear, mono-objective and multi-objective; multi-attribute decision; interpolation; regression; Monte Carlo simulation method.

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

Course description (Syllabus): financial and accounting statements: balance sheet; profit and loss; companies accounting regime: account and account charts, operating accounts rules; capital accounts; accounting for fixed assets; stock accounting; treasury accounting; **accounting** for settlements with third parties; trial balance accounting; activities at the close of financial year.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Basics of Management	BM	4	2	2	-	-

Course description (Syllabus): introduction to management and manufacturing systems; decision; making decisions; participatory management; management organization; planning and control of activity; design of manufacturing systems; investments economic efficiency.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Economic Statistics	ES	4	1	-	2	-

Course description (Syllabus): This course introduces fundamental statistical methods used in economic analysis and decision-making. Topics include parameter estimation, hypothesis testing, and product quality control. Students will also study regression analysis, with emphasis on its application in economic modelling and forecasting. The course focuses on practical statistical techniques for analysing economic data and supporting business decision-making.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Mechanisms	MEC	4	2	-	-	2

Course description (Syllabus): This course provides an in-depth study of mechanisms and machine elements, focusing on their structure, kinematics, and dynamics. Students will explore the general structure of mechanisms, including joints, structural modelling of complex mechanisms, and structural optimization. The course covers the kinematics and dynamics of involute gears, planetary gears, linkage mechanisms, and cam gears. Additionally, it includes gear calculations, force analysis, shafts, bearings, seals, and belt transmissions. Special attention is given to motor speed control devices and various mechanical assemblies, such as screw connections, shape-based connections (keys, studs, grooves, bolts, etc.), friction-based assemblies, elastic assemblies (springs), and couplings. The course equips students with essential knowledge for designing and analysing mechanical systems in engineering applications.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Strength of Materials	SM	4	2	1	1	-

Course description (Syllabus): This course explores fundamental concepts in mechanics and strength of materials, focusing on the mechanical behaviour of structures under various loading conditions. Students will study the mechanical properties of materials, external stresses and constraints, and the fundamental equilibrium equations. The

course covers sectional stress analysis, including general principles, differential relationships between forces and sectional stresses, stress diagrams, static and inertial moments, axial stress, shear stress, bending, and the basics of elasticity theory. These concepts provide the essential foundation for the design and analysis of mechanical and engineering structures.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Economic Legislation	EL	3	1	1	-	-

Course description (Syllabus): This course provides an overview of the legal framework governing business operations, with a particular focus on company closure procedures. Topics include the winding up of solvent companies, close-out processes, and commercial bonds. Students will also examine the legal aspects of insolvency and its implications for businesses, creditors, and other stakeholders. The course equips students with a solid understanding of economic and legal regulations relevant to corporate activities and financial accountability.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physical Education and Sports 3	PES3	1	1	1	-	-

Course description (Syllabus): This course further develops the abilities and knowledge acquired in Physical Education and Sports 1 and Physical Education and Sports 2, advancing students' physical fitness and sport-specific competencies. Activities continue to be structured across four sport disciplines, enabling students to perfect their techniques, enhance performance, and engage in more demanding practice situations. The program reinforces teamwork, discipline, and fair play, while supporting long-term healthy lifestyle habits. By the end of the course, students will demonstrate higher levels of physical conditioning, refined technical and tactical skills, and increased proficiency in both individual and team-based sporting activities.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Business data processing	BDP	4	2	-	2	-

Course description (Syllabus): introduction to database; data management; design; implementation; management system database; planning, design and managing database; modelling entity-relationship; database normalization; conceptual design methodology for databases; logical design methodology for database relational model; physical design methodology for relational databases.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Machine Elements	ME	4	2	-	-	1

Course description (Syllabus): general structure of mechanisms: joints; structural modelling of complex mechanisms; structural optimizing of mechanisms; Kinematics and dynamics of: involute gears; planetary gear; linkage mechanisms; cam gear: kinematics; gears: calculus, forces; shafts; bearings; seals; belt gearing; motor speed control devices; assemblies: screw; shape (keys, studs, grooves, bolts, etc.); friction assemblies; elastic assemblies – springs; couplings.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Structure and performance of products	SPP	3	1	-	-	2

Course description (Syllabus): the functional principles of industrial products; tolerance and technical control; mechatronic structures; automatic control systems; performance of industrial systems.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Finance	FC	4	2	2	-	1

Course description (Syllabus): introduction to business finance; balance sheet analysis; analysis on income and loss account; self-financing capacity; breakeven; analysis based on rate method; planning financial activities; short-term management of the enterprise; medium- and long-term financing of the enterprise; stocks; investment funding; dividends policies; financing plan; capital cost and structure; economic and financial risk.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Economic Forecasts	EF	3	2	2	-	-

Course description (Syllabus): Probability: space; independent events; random variables; binomial, hypergeometric and Poisson distribution; Statistics: parameters estimation; hypothesis test; product quality control; regressive analysis; Operational research: linear programming; simplex algorithm.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Marketing	Mk	4	2	1	-	1

Course description (Syllabus): Marketing concept; market;company marketing strategies; marketing mix; product and product strategy; price and pricing strategy;distribution and distribution strategy; promotion and advertising strategy.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physical Education and Sports 4	PES4	1	-	1	-	-

Course description (Syllabus): Football: playing without ball; foot hitting; head hitting; strategies. Basketball: techniques; tactical offensive and defensive; contra-offensive; bilateral game.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Practice 1 (90 hours / year)	PRI	4	-	-	-	-

Course description (Syllabus): moulding sectors; hot forming sectors; heat treatment; galvanic coating; welding technologies.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
English language 3a	EL3a	2	1	1	-	-

Course description (Syllabus): quadratic equations; simultaneous equations; indices and logarithms; geometry; trigonometry; functional notations. limits; differentiation; integration; simple harmonic motion; rotation of a rigid body; beyond Newton's law; fields: strength and forces, potential energy.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
French language 3b	FL3b	2	1	1	-	-

Course description (Syllabus): quadratic equations; simultaneous equations; indices and logarithms; geometry; trigonometry; functional notations. limits; differentiation; integration; simple harmonic motion; rotation of a rigid body; beyond Newton's law; fields: strength and forces, potential energy.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
English language 4a	EL4a	2	1	1	-	-

Course description (Syllabus): metals; measurement; design and function; energy, heat and work; control devices; pumps; air-conditioning systems; diesel engines; refrigeration systems; data communications; electric power systems; telecommunications; engineering design; engineering and the Earth's resources.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
French language 4b	FL4b	2	1	1	-	-

Course description (Syllabus): metals; measurement; design and function; energy, heat and work; control devices; pumps; air-conditioning systems; diesel engines; refrigeration systems; data communications; electric power systems; telecommunications; engineering design; engineering and the Earth's resources.

3rd Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Organization of production	OP	4	1	2	-	-

Course description (Syllabus): management functions; company concept; company environment; company attributes; types of companies; resources raised and use by a company; production management.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Quality engineering	QE	4	2	-	2	-

Course description (Syllabus): quality; quality engineering; presentation and processing experimental data; quality statistic control; capability analysis; production analysis using control cards; product receiving control; quality assurance costs.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Computerized product design 1	CPD1	5	2	-	2	

Course description (Syllabus): fundamentals of CAD; CAD systems; program interface; drawing editor; coordinates systems; display commands; graphic tools; objects selection; editing and modifying objects; objects properties; dimensioning; hatching; design optimisations; external block and references; text editing; drawing information; drawing plotting.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Business with innovative products	BIP	4	2	2	-	-

Course description (Syllabus): the role of product innovation, the relationship of innovation with the market, the moment of applying the innovation, the costs and benefits of innovation.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Command and Drive Systems Engineering	CDSE	5	2	-	2	-

Course description (Syllabus): mechanics of industrial machine tools; general electric devices and equipment; three phase asynchronous engine; electric direct current engine; step by step engines and driving; hydraulic driving systems; hydraulic machine tools; hydraulic devices and equipment for commanding and regulating the debit and pressure; hydraulic circuits.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
The basics of product manufacturing	BPM	5	2	-	1	1

Course description (Syllabus): general notions regarding the material cutting and surface generation; cutting force and specific cutting force; behaviour of different materials during the cutting process; thermic phenomenon in the cutting process; wear and tool life; main cutting processes: turning, milling, drilling, grinding, slotting, shaping, thread processing; roughness of the processed surfaces; processing costs; general notions regarding the numerical control of the cutting process.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Risk management in business	RMB	3	1	2	-	-

Course description (Syllabus): risk theory; types of risks;methods for identifying risk; economic risk (operating); financial risk; risk in investment decision.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Modelling and simulation of manufacturing systems	MSMS	4	2	-	1	1

Course description (Syllabus): general aspects regarding modelling and simulation; simulation stages of the manufacturing systems; modelling and simulation of waiting processes; inventory modelling and simulation; fuzzy models; dynamic modelling and simulation; forecasting methods and techniques; modelling and simulation of flexible manufacturing systems.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Computerized design of products 2	CDP2	5	2	-	2	1

Course description (Syllabus): establishing a product architecture; conceptual analysis of a product; identify consumer needs and opportunities; setting product concepts; prototyping, testing, standardization; robust design.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Technologies management	TMN	4	2	-	2	-

Course description (Syllabus): the role of technology in business; technological fields; technical and economic parameters of technology; technology assessment; creation and application of technology; technology strategy.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Industrial machinery and equipment	IME	4	2	-	2	-

Course description (Syllabus): structure of manufacturing equipment; manufacturing equipment for cutting processes; processing centres for turning and milling; manufacturing equipment for nonconventional processing; notions regarding rapid manufacturing; performances of manufacturing equipment.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Practice in speciality (90 hours / year)	PRS	4	-	-	-	-

Course description (Syllabus): analysis of the product nomenclature of a company; organizational structure of a company and relations among different departments; documents of book keeping; procedures for purchasing and starting of manufacturing; procedures for tracking and monitoring the production process; methods and proceedings

for product analysis; organizing goods disposal process; marketing and promotion methods; general notions regarding the investment process; aspects regarding continuous improvement.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Criminal law	CL	3	2	1	-	-

Course description (Syllabus): the principles of criminal law; sources of criminal law; short history; categories of criminal laws; the legal-criminal norm; the interpretation of criminal law; application of the criminal law; forms of legal assistanceacts and deeds of commerce; commercial obligations; commercial sales contract; commercial mandate and commission; consignment contract; debt securities.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
International law	IL	3	1	2	-	-

Course description (Syllabus): fundamental institutions of international law; state responsibility and responsibility of states in contemporary international law; the right of treaties and the practice of negotiations; the liability of the individual in international law.; employee rights; employer rights; contracts of employment; settlement of disputes.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Human resources management	HRM	3	1	2	-	-

Course description (Syllabus): human resource function of the firm; forecasting the human resources within a firm; human resources evaluation; educating, training and development of human resources; labour motivational and performance system; rewarding management system; labour conditions and relations; records and administration of human resources.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Project Management	PM	3	1	2	-	-

Course description (Syllabus): the concept of management project; ; tools used in project management; business plan; project life cycle; sources of project financing; the project.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Industrial materials	IM	3	1	-	2	-

Course description (Syllabus): natural and synthetic raw materials; energy and non-energy raw materials; raw materials and sustainable development; choice of raw materials; cast billets, forgings, or welded; other semi-products; semi-products choice.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Biotechnology	BIO	3	1	-	2	-

Course description (Syllabus): the bases of biotechnologies; industrial biotechnologies; design of biotechological installations; recycling biotechnologies.

4th Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Engineering of production systems	EPS	4	2	-	-	2

Course description (Syllabus): manufacturing system development; mathematical models of manufacturing; design of manufacturing systems; designing the logistics subsystem; designing the maintenance subsystem; design of functional services; designing ancillary and support services; selection of manufacturing system placement; manufacturing capacity calculus.

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

Course description (Syllabus): introductive notions in economic financial analysis; indicators used in economic financial analysis; analysis of manufacturing and selling activity; human resources analysis; material resources analysis; expenses analysis; profitability analysis; analysis of the financial situation of an enterprise, elaboration of a company's economic and financial analysis project.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Logistics	LOG	4	2	-	2	-

Course description (Syllabus): logistics, integrating function and competitively factor; logistic activities; product inventory; management of internal transport activity; internal logistics; new approaches regarding the integration of modern concepts of manufacturing administration; trends in the field of logistics and supply chain management.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Digital product design	DPD	3	1	-	2	-

Course description (Syllabus): establishing a product architecture; conceptual analysis of a product; identify consumer needs and opportunities; setting product concepts; prototyping, testing, standardization; robust design.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Developing business in services	DBS	5	2	2	-	-

Course description (Syllabus): the specific business of the service; types of business in services; designing business in services; financing; business risks in services.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Feasibility and Efficiency of Investments	FEI	5	2	1	-	1

Course description (Syllabus): firm, the main fain form of organization of a business; introduction in investment process; types of investments; stages of an investment process; strategies for identifying and exploiting financial sources of economic activities; strategic decision: the necessity of correlating the financing decision with investment decision; sources and financing modalities of investments; lending; influence of time upon investment process; components of an investment project feasibility; economical financial appraisal of an investment project; influence of the financing system upon the investment process; appraisal of the decision methods in selecting investment projects

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
International commerce*	IC	4	1	1	-	1

Course description (Syllabus): company's position in international economic relations; specific legal framework; licensing, representation; economic integration; payment; business consulting.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Technological innovation*	TI	4	2	1	-	1

Course description (Syllabus): the role of research, development; stages of research, development; methods for developing new products; technological research; evaluation of research results; research-based business.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
E-Busienss	EB	2	1	1	-	-

Course description (Syllabus): categories of electronic commerce; business models used in electronic commerce; payment methods; risks in e-commerce; the benefits of e-commerce.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Engineering and Business Management*	EBM	5	2	1	-	2

Course description (Syllabus): typology business; business life cycle; characterized parameters of business; specifics of doing business; business with industrial products; business with technology; business with knowledge; maintenance, recovery, development, sale, liquidation of business.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Negotiation and ethics in business*	NEB	3	2	2	-	-

Course description (Syllabus): commercial contracts; structure and contract terms; scope, functions and role negotiation; moral norms; standard ethical theories; ethics and business.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Drafting the Diploma Project	DDP	4	-	-	-	14

Course description (Syllabus): set the theme; bibliographic documentation; market study; technical project elaboration; financial projections; financing; risks.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Practice for the Diploma Project (60 hour / year)	PDP	4	-	-	-	-

Course description (Syllabus): documentation; specifying the title and the aim; specification of the operationl aobjectives; business description of the object; market research; application development options; financial aspects; risks.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Money, banks, capital markets*	MBCM	4	1	2	-	-

Course description (Syllabus): capital market; securities; stock exchange; quotation of securities;market indices; stock exchange transactions.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Strategic management	SM	4	1	2	-	-

Course description (Syllabus): the concept of strategic management; typology of strategies; formulation, implementation, evaluation strategy; strategic planning; the role of trade policies; trade liberalization.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Marketing researches*	MR	2	1	1	-	-

Course description (Syllabus): market strategies, factors that give strength to the market, methods of market research, methods of promotion, evaluation of marketing efficiency.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Public policies*	PP	2	1	1	-	-

Course description (Syllabus): the role of public policies in social development, criteria for determining priorities, methods of attracting investments, ensuring financing, efficiency of public policies.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Sustainable Development*	SD	2	1	1	-	-

Course description (Syllabus): the concept of sustainable development; the relationship between economic development and environmental degradation; methods of sustainable socio-economic development; the benefits of sustainable development.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Business diagnosis and evaluation	BDE	2	1	1	-	-

Course description (Syllabus): the role of business diagnostics and evaluation, criteria used in business diagnostics, methods of diagnosing, applying results, methods of business evaluation.

* - duration of the disciplines 10 weeks