

ROMANIAN-AMERICAN
UNIVERSITY



ACCREDITED BY LAW 274/MAY 15, 2002

2021-2022

STUDY GUIDE

*Study program
bachelor*

Computer Science for Economics



**YOUR CHOICE, YOUR FUTURE,
CHOOSE TO BE THE BEST!**

SCHOOL OF COMPUTER SCIENCE FOR BUSINESS MANAGEMENT



STUDY GUIDE 2021 - 2022

BACHELOR STUDY PROGRAM: COMPUTER SCIENCE FOR ECONOMICS

The Romanian-American University (RAU) is a higher education institution, a legal person of private law and public utility, part of the national system of education, founded in 1991, accredited by law in 2002, receiving the qualification “High confidence rating” from ARACIS (Romanian Agency for Quality Assurance in Higher Education) since 2010, whose mission is to offer high quality education and research, in an intellectually stimulating environment both for students and for the teaching staff. All bachelor and master studies programs, offered by the seven schools of RAU (Computer Science for Business Management; Domestic and International Business, Banking and Finance; Domestic and International Tourism Economics; European Economic Studies; Management-Marketing; Law; Physical Education, Sport and Kinesiotherapy) are accredited and ranked by the national Ministry of Education among the first categories since 2011.

The **mission** of the Romanian-American University consists in *education, teaching, scientific research and innovation, the cultivation of scientific values and of universal culture in general, especially in the fields of economics, law and sport.*

Through its mission, the university means to contribute to:

- the promotion of excellence in education, scientific research, innovation and technological transfer, as well as of professional, moral and social responsibility and of creativity in the fields of competence;
- the treasuring and promotion of values of national and universal culture and civilization;
- the defense of an academic democratic framework based on university autonomy and respect for the law, on the fundamental human rights and liberties in the state of law.

According to the Charta, the fulfilment of the mission of the Romanian-American University may be achieved through:

- the formation of specialists with superior training in the fundamental fields of science in which the university organizes bachelor, master and doctoral studies programs, which are authorized or accredited according to the law;
- the carrying out of specific fundamental scientific research and applicative activities, through the specialized departments, centers and research LABies as well as other organization bodies;
- entrepreneurial activities which comprise consultancy programs, specialized assistance, business incubators etc.;

- the affirmation of academic/didactic and scientific achievements of community members through participation in reunions, scientific events etc. organized at national and international levels;
- ongoing learning through post-academic studies, trainings etc.;
- professional formation through education programs carried out in Romanian or in widely used international languages and mobility programs, in agreement with the law.

VISION of RAU

In promoting a particularly strategic academic management, the Romanian-American University sets for itself as an objective its national and international recognition as an elite university.

VALUES of RAU

- The promotion of excellence;
- Professional, moral and social responsibility;
- Freedom of thought and speech;
- Creativity and innovation;
- Cooperation and communication.

Through the promotion of value in education, research and innovation, our university will lastingly consolidate its position at a national and international level, being a partner for the community which it is part of, placing at the center of its concerns life improvement and experience enhancement for the main beneficiaries of its activity: students, alumni, teaching staff and administrative personnel.

STRATEGIC OBJECTIVES of RAU

The main general strategic objectives which result from the mission, vision and values of the Romanian-American University are:

O.1. boosting national and international recognition for the quality of its educational and professional formation activities;

O.2. the support and consolidation of research-innovation activities and dissemination of results through measures adapted to individual and collective needs;

O.3. the development of value and partnership with students, alumni, teaching staff and administrative personnel and with other partners and components of the academic community;

O.4. the consolidation of the partnership with representatives of the economic-social environment, employers and other components of society;

O.5. increase of the degree of internationalization of the university on the academic and administrative layers;

O.6. increase of the quality and effectiveness of academic processes in relation with various categories of relevant public from the internal and external environments;

O.7. the development of entrepreneurial culture and sustainable university vision.

The mission and the objectives assumed by RAU individualize the university within the Romanian National System of Higher Education through **clarity, distinction and focus**. The general strategy of RAU focuses on **real** integration within the European educational framework and the **internationalization** of teaching and research activities.

Under the conditions of adopting the educational values of the European and American higher education systems, **scientific research** in RAU becomes a defining condition for its affirmation and existence.

International experience constitutes an essential component of student education and teaching staff training. RAU has **accords and memorandums with universities and other prestigious entities from USA, Europe, South America, Australia and Asia**. Numerous inter-academic exchanges for students and faculty are deployed through these partnerships, aiming to permanently adapt and implement values of the higher education systems from USA and Europe, in order to raise the standards of quality and competitiveness of the educational process.

Each year, RAU organizes international summer schools in partnerships with James Madison University (USA), University of Alabama in Huntsville (USA) and other international partners. RAU students benefit from scholarships to study all over the world. The international component of the student life comprises, besides scholarships to study abroad, participation at interactive classes taught by prestigious professors from all over the world, online courses, scientific events, summer schools, international meetings etc. – all these things aiming to increase the horizon of our students through an international approach, a possibility to globally apply what they learn and, also, to obtain different certificates attesting their experience and expertise.

Considered as the best private university in Romania (according to the “University Ranking” study done by the German company Kienbaum Management Consultants in cooperation with the Capital magazine) RAU’s international relations are a key component of its development strategy.

Scholarships, quality of education, parthernship with the business environment, developing general and specialy competences required by the employers and implicitly the guarantee of a fast insertion on the labour market, represent distinctive characteristics of RAU, which provide a competitite advantage for the university.



An essential condition for fulfilling its assumed mission and objectives regarding teaching, scientific research and efficient administration, is represented by the existence of a modern campus, meeting all the requirements of the higher education field.

RAU has a vast number of dedicated spaces for: educational activities, scientific research and administrative offices. All spaces are equipped with technical equipment, computers, didactic materials, software, internet access, intranet space and access to the library.



With a surface of over 34.500 m², the **Campus** comprises: an Aula Magna, amphitheatres, lecture rooms, scientific research labs and centers, IT labs, forensics lab, international negotiations simulation lab, audio lab, library, medical practice, sport and fitness areas, student club, tourism agency, chapel, technical and administrative offices, hostel with 11 floors, cafeteria – restaurant etc.





Come JOIN US!

Your CHOICE, Your FUTURE!

PART II:

Professional Perspectives

The School of Computer Science for Business Management offers to its graduates specialized knowledge, both theoretical and practical, according to the current requirements of the field of “Economics Informatics”, their employment being usually done even before graduation. According to continuous analyses, over 92% of the graduates are employed in the field they trained for, in less than one year since graduating. The school offers career guidance, through facilitating meetings between employers and students and other regular events involving business entities and students, for the entire duration of the study program.

The specialized internship is held either inside the RAU own labs, under the supervision of specialists from prestigious partners within the business environment (eg. Microsoft, IBM, Oracle etc.), or in different companies/entities in the IT&C field, with which the school cooperates, or in other companies/entities with which the students cooperate, thus ensuring the link between the theoretical and practical abilities that specialists in the fields of economics informatics should acquire.

Graduates of this program can work within companies in the IT sector, as well as within any company/entity needing economics or IT expertise. Their competences cover the following positions:

- information systems analyst;
- computer systems designer;
- analyst programmer;
- programmer;
- client-server and internet / intranet / extranet application developer;
- IT project manager;
- website designer;
- database administrator;
- computer network administrator;
- website administrator;
- developer of decision support systems and expert systems;
- consultant in the field of information technologies.

They can also work as economist, having the distinctive advantage of mastering a rich informatic tools-set and having specialized abilities to use computer systems.

The general competencies of the graduates are:

- design, implementation and operation of computer systems / applications;
- performing information system analyzes at micro and macro economic level;
- designing and creating websites;
- Internet documentation, development and operation of e-business applications;
- ability to work in a team;
- research methods and techniques in the field of Economic Informatics.
- collecting, processing and synthesizing economic data and information.

PART III:

CURRICULUM (SHORT DESCRIPTION OF DISCIPLINES)

YEAR I. SEMESTER 1 - 14 WEEKS

MANDATORY DISCIPLINES (D.O)

1. MICROECONOMICS

HOURS: 56 OUT OF WHICH 28/COURSE AND 28/SEMINAR

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

STUDENTS 'ACQUISITION OF THE BASIC CONCEPTS OF ECONOMIC SCIENCE AND THE FUNDAMENTALS OF MODERN ECONOMIC THINKING. ACQUIRING THE ABILITY TO APPLY THE THEORETICAL CONCEPTS IN PRACTICE.

2. LAW

HOURS: 28 OUT OF WHICH 28/COURSE

CREDITS FOR GRADUATING: 3

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ACQUISITION OF KNOWLEDGE REGARDING THE FUNDAMENTAL ELEMENTS OF ROMANIAN CIVIL LAW, AS WELL AS THOSE OF GENERAL INTEREST REGARDING THE ROMANIAN LEGISLATIVE SYSTEM.

3. COMMUNICATION AND PUBLIC RELATIONS

HOURS: 28 OUT OF WHICH 28/COURSE

CREDITS FOR GRADUATING: 3

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ACQUISITION AND APPROPRIATE USE OF THEORETICAL AND APPLICATIVE NOTIONS SPECIFIC TO THE CONTENT OF THE COURSE IN COMMUNICATION AND PUBLIC RELATIONS.

4. ECONOMIC INFORMATICS

HOURS: 42 OUT OF WHICH 14/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

STUDENTS 'ACQUISITION OF THE PRACTICAL WAYS OF USING THE MAIN SOFTWARE APPLICATIONS USED IN THE OFFICE ACTIVITY: TEXT PROCESSORS, TABULAR COMPUTING PROGRAMS, PROGRAMS FOR COMMERCIAL PRESENTATIONS, PROGRAMS FOR BASIC WEB PAGE DESIGN, PROGRAMS FOR MANAGING E-MAIL ACCOUNTS AND MESSAGES.

5. ALGORITHMS AND DATA STRUCTURES

HOURS: 56 OUT OF WHICH 28/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 6

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

LEARNING THE FUNDAMENTALS OF THE PROGRAMMING ACTIVITY IN GENERAL, ESPECIALLY OF THE STRUCTURED PROGRAMMING, THE FORMATION OF THE ALGORITHMIC THINKING. ACQUISITION OF CONCEPTS REGARDING THE ALGORITHMS AND THE WAYS TO REPRESENT THEM. DATA ORGANIZATION, DATA STRUCTURES.

6. FUNDAMENTALS OF ACCOUNTING

HOURS: 56 OUT OF WHICH 28/COURSE AND 28/SEMINAR

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

LEARNING THE BASICS OF ACCOUNTING THEORY, PRINCIPLES AND TECHNIQUES OF ORGANIZING AND FUNCTIONING OF A COMPANY, LEARNING THE REGISTRATION AND PROCESSING OPERATIONS FOR THE ACCOUNTING SYSTEMS.

7. ENGLISH AND COMMUNICATION TECHNIQUES I

HOURS: 28 OUT OF WHICH 28/SEMINAR

CREDITS FOR GRADUATING: 3

EVALUATION PROCEDURE: VERIFICARE

DISCIPLINE OBJECTIVES:

ACQUISITION BY STUDENTS OF COMPETENCES RELATED TO THEORY OF COMMUNICATION IN GENERAL, APPLICABLE TO THE ECONOMIC FIELD. ASSIMILATION OF GRAMMAR STRUCTURES OF THE ENGLISH LANGUAGE. ACHIEVING EFFICIENT, EASY, OPERATIONAL AND CREATIVE COMMUNICATION CAPACITY IN ENGLISH, FOR MANAGEMENT AND ADMINISTRATION ACTIVITIES. DEVELOPING AND USING SPECIFIC NEGOTIATION STYLES.

8. SPORT

HOURS: 28 OUT OF WHICH 28/LAB

CREDITS FOR GRADUATING: 2

EVALUATION PROCEDURE: COLLOQUIUM

YEAR I. SEMESTER 2 - 14 WEEKS

MANDATORY DISCIPLINES (D.O)

1. MACROECONOMICS

HOURS: 42 OUT OF WHICH 28/COURSE AND 14/SEMINAR

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

STUDENTS' ACQUISITION OF THE BASIC CONCEPTS OF ECONOMIC SCIENCE AND THE FUNDAMENTALS OF MODERN ECONOMIC THINKING. ACQUIRING THE ABILITY TO APPLY THE THEORY IN PRACTICE – AT MACROECONOMIC LEVEL.

2. FINANCE

HOURS: 42 OUT OF WHICH 28/COURSE AND 14/SEMINAR

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

STUDY OF THE MAIN ELEMENTS REGARDING THE PURPOSE OF PUBLIC FINANCES AND COMPANY FINANCES. ACQUISITION OF THEORETICAL AND PRACTICAL ASPECTS REGARDING THE MANAGEMENT OF THE PUBLIC EXPENDITURE SYSTEM AND THE SYSTEM OF PUBLIC FINANCIAL RESOURCES IN ROMANIA.

3. MATHEMATICS FOR ECONOMICS

HOURS: 56 OUT OF WHICH 28/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 6

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ACQUISITION AND ADEQUATE USE OF THEORETICAL AND APPLICATIVE NOTIONS SPECIFIC TO THE COURSE CONTENT IN THE MODELING OF ECONOMIC-SOCIAL PHENOMENA.

4. OBJECT ORIENTED PROGRAMMING

HOURS: 56 OUT OF WHICH 28/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ACQUIRING THE FUNDAMENTALS OF THE PROGRAMMING ACTIVITY BASED ON OBJECTS ORIENTED PARADIGM. ACQUIRING THE CONCEPTS REGARDING OBJECTS, CLASSES AND THEIR CHARACTERISTICS.

5. COMPUTER ARCHITECTURE AND OPERATING SYSTEMS

HOURS: 56 OUT OF WHICH 28/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 6

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ACQUISITION OF BASIC CONCEPTS REGARDING THE CONSTRUCTION, FUNCTIONING AND OPERATION OF PERSONAL COMPUTERS. TO THIS PURPOSE, WE PRESENT AND COMPARE THE CONSTRUCTIVE AND FUNCTIONAL PRINCIPLES OF PCS AND THE FUNDAMENTAL NOTIONS OF WINDOWS, SOLARIS, LINUX OPERATING SYSTEMS, IN THE DIFFERENT VARIANTS AND VERSIONS AVAILABLE ON THE MARKET. STUDENTS WILL DEVELOP THEIR CAPACITY TO ANALYZE AND SYNTHETIZE THROUGH THE ELABORATION OF PROJECTS PROVIDED IN THE LIST OF INDIVIDUAL WORKS OF THE DISCIPLINE.

6. ENGLISH AND COMMUNICATION TECHNIQUES II

HOURS: 28 OUT OF WHICH 28/SEMINAR

CREDITS FOR GRADUATING: 3

EVALUATION PROCEDURE: VERIFICARE

DISCIPLINE OBJECTIVES:

ACQUISITION BY STUDENTS OF COMPETENCES RELATED TO THEORY OF COMMUNICATION IN GENERAL, APPLICABLE TO THE ECONOMIC FIELD. ASSIMILATION OF THE GRAMMAR STRUCTURES OF THE ENGLISH LANGUAGE, ACHIEVING THE EFFICIENT, EARLY, OPERATIVE AND CREATIVE COMMUNICATION CAPABILITY IN THE ENGLISH LANGUAGE IN THE DEVELOPMENT AND DEVELOPMENTAL ACTIVITIES OF MANAGEMENT AND DEVELOPMENT.

7. SPORT

HOURS: 28 OUT OF WHICH 28/LAB

CREDITS FOR GRADUATING: 2

EVALUATION PROCEDURE: COLLOQUIUM

YEAR II. SEMESTER 1 - 14 WEEKS

MANDATORY DISCIPLINES (D.O)

1. SOFTWARE PROGRAMMING I

HOURS: 58 OUT OF WHICH 28/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

KNOWLEDGE OF C++ PROGRAMMING POSSIBILITIES, APPLICATION SOFTWARE DEVELOPMENT. ELEMENTS OF C++ LANGUAGE; CONSTANTS, VARIABLES, IDENTIFIERS, MEMORY CLASSES, REPRESENTATIONS, SYMBOLIC CONSTANTS, AVOIDANCE SEQUENCES. OPERATORS, EXPRESSIONS, STANDARD C++ LIBRARIES.

2. DATABASES I

HOURS: 58 OUT OF WHICH 28/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 4

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

STUDY AND ACQUISITION OF METHODS, TECHNIQUES AND INSTRUMENTS USED IN THE ANALYSIS, DESIGN, IMPLEMENTATION AND OPERATION OF DATABASE COMPUTER APPLICATIONS IN DIFFERENT ECONOMIC-SOCIAL FIELDS. ACQUISITION AND USE OF THE RELATIONAL ACCESS DBMS.

3. ECONOMIC CYBERNETICS

HOURS: 58 OUT OF WHICH 28/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 4

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ACQUISITION OF THEORETICAL KNOWLEDGE AND FORMATION OF PRACTICAL SKILLS IN THE FIELD OF ANALYSIS AND MODELING OF CYBERNETIC-ECONOMIC SYSTEMS AT MICRO AND MACRO ECONOMIC LEVEL.

4. STATISTICS

HOURS: 42 OUT OF WHICH 28/COURSE AND 14/SEMINAR

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

THE COURSE OF THEORETICAL AND ECONOMIC STATISTICS AIMS TO PROVIDE KNOWLEDGE REGARDING THE BASIC CONCEPTS AND TECHNIQUES USED IN OBTAINING, SYSTEMATIZATION, PROCESSING, PRESENTING AND ANALYSIS OF SOCIAL MASS PROCESSES.

5. MARKETING

HOURS: 42 OUT OF WHICH 28/COURSE AND 14/SEMINAR

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

LEARNING THEORETICAL CONCEPTS REGARDING THE ESSENCE, FUNCTIONS AND PLACE OF MARKETING IN THE ECONOMIC ACTIVITY. KNOWLEDGE OF THE WAYS OF IMPLEMENTING THE MARKETING POLICIES AND STRATEGIES REGARDING THE PRODUCT, PRICE, DISTRIBUTION, PROMOTION IN THE DECISION-MAKING PROCESS OF THE ACTIVITY OF THE ECONOMIC AGENTS.

6. ENGLISH AND COMMERCIAL CORRESPONDENCE I

HOURS: 28 OUT OF WHICH 28/SEMINAR

CREDITS FOR GRADUATING: 3

EVALUATION PROCEDURE: COLLOQUIUM

DISCIPLINE OBJECTIVES:

STUDENTS' ACQUISITION OF ECONOMIC, POLITICAL, BANKING-FINANCIAL, ADMINISTRATIVE, BUSINESS LANGUAGE IN ENGLISH. ASSIMILATION OF GRAMMAR STRUCTURES OF THE ENGLISH LANGUAGE. ACHIEVING EFFICIENT, EASY, OPERATIONAL AND CREATIVE COMMUNICATION CAPACITY IN ENGLISH IN MANAGEMENT ACTIVITIES. ACQUISITION OF FLUENCE, SPONTANEITY, ACCURACY AND AUTONOMY IN ORAL AND WRITTEN BUSINESS COMMUNICATION.

YEAR II. SEMESTER 2 - 14 WEEKS

MANDATORY DISCIPLINES (D.O)

1. SOFTWARE PROGRAMMING II

HOURS: 44 OUT OF WHICH 22/COURSE AND 22/LAB

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

OBJECT ORIENTED PROGRAMMING IN C++. CONCEPTS OF OBJECT PROGRAMMING. CLASSES. CONSTRUCTION. DESTRUCTOR. HERITAGE. POLYMORPHISMS. TEMPLATE CLASSES. OVERDEFINITION OF OPERATORS AND FUNCTIONS. VIRTUAL FUNCTIONS AND CLASSES. OBJECTS AND CLASSES FOR WORKING WITH FILES. ABSTRACT CLASSES; CLASS LIBRARIES.

2. ADVANCED PROGRAMMING ENVIRONMENTS - JAVA

HOURS: 44 OUT OF WHICH 22/COURSE AND 22/LAB

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ENSURES STUDENTS WITH THE OPPORTUNITY TO DEVELOP, INTEGRATE AND MAINTAIN SOME OF THE MOST MODERN AND APPRECIATED TYPES OF PROGRAMS, BASED ON JAVA LANGUAGE, AS WELL AS THE POSSIBILITY OF APPLICATIONS DEVELOPMENT FOR VIRTUALLY ANY CURRENT IT DEVICE, INCLUDING SMARTPHONES OR IOT DEVICES.

3. ECONOMETRICS

HOURS: 44 OUT OF WHICH 22/COURSE AND 22/LAB

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

CREATING SKILLS FOR ANALYSIS AND FORECASTING THE EVOLUTION OF ECONOMIC VARIABLES AND FOR IDENTIFYING THE DEPENDENCIES BETWEEN THEM.

4. MANAGEMENT

HOURS: 33 OUT OF WHICH 22/COURSE AND 11/SEMINAR

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ENSURING THE KNOWLEDGE BY STUDENTS OF THE CONCEPTS AND COMPONENTS SPECIFIC TO MODERN MANAGEMENT. TRAINING AND DEVELOPMENT OF SKILLS, ABILITIES AND MANAGMEENT BEHAVIOR CORRESPONDING TO THE REQUIREMENTS OF A DYNAMIC AND EFFICIEN ACTIVITIES AT COMPANY LEVEL, AS WELL AS FOR THE REQUIREMENTS OF THE MODERN MARKET ECONOMY, WITH A FOCUS ON INNOVATION, CREATIVITY AND ENTREPRENEURSHIP. DEVELOPMENT OF SYSTEMIC THINKING, BASED ON THE FIRM'S APPROACH IN CLOSE INTERDEPENDENCE WITH ITS ECOSYSTEM, IN ORDER TO ENSURE SUSTAINABLE DEVELOPMENT.

5. ENGLISH AND COMMERCIAL CORRESPONDENCE II

HOURS: 22 OUT OF WHICH 22/SEMINAR

CREDITS FOR GRADUATING: 3

EVALUATION PROCEDURE: VERIFICARE

DISCIPLINE OBJECTIVES:

STUDENTS' ACQUISITION OF ECONOMIC, POLITICAL, BANKING-FINANCIAL, ADMINISTRATIVE, BUSINESS LANGUAGE IN ENGLISH. ASSIMILATION OF GRAMMAR STRUCTURES OF THE ENGLISH LANGUAGE. ACHIEVING EFFICIENT, EASY, OPERATIONAL AND CREATIVE COMMUNICATION CAPACITY IN ENGLISH IN MANAGEMENT ACTIVITIES. ACQUISITION OF FLUENCE, SPONTANEITY, ACCURACY AND AUTONOMY IN ORAL AND WRITTEN BUSINESS COMMUNICATION.

6. SPECIALIZED INTERNSHIP

HOURS: 90 OUT OF WHICH 90/INTERNSHIP

CREDITS FOR GRADUATING: 3

EVALUATION PROCEDURE: COLOCVIU

DISCIPLINE OBJECTIVES:

FIXING SPECIALTY KNOWLEDGE, ESPECIALLY FOR THE DISCIPLINES IN THE CURRICULUM FOR THE SECOND. DEVELOPING PRACTICAL SKILLS AND FINDING OUT THE BUSINESS ENVIRONMENT REALITIES.

YEAR III. SEMESTER 1 - 14 WEEKS

MANDATORY DISCIPLINES (D.O)

1. INFORMATION SYSTEMS DESIGN

HOURS: 56 OUT OF WHICH 28/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ACQUISITION OF GENERAL CONCEPTS REGARDING DATA AND PROCESSES MODELING, LOGICAL AND PHYSICAL MODELING, DESIGN OF A COMPUTER SYSTEM OR COMPUTER APPLICATION USING SYSTEMIC METHODS. IBM AND SSADM DESIGN METHODOLOGIES ARE STUDIED IN DETAIL.

2. DATABASES II

HOURS: 56 OUT OF WHICH 28/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ENSURES STUDENTS THE POSSIBILITY OF UNDERSTANDING THE RELATIONAL MODEL, MASTERING THE TECHNIQUES OF DESIGNING THE RELATIONAL DATABASES.

3. OPERATIONAL RESEARCH

HOURS: 56 OUT OF WHICH 28/COURSE AND 28/SEMINAR

CREDITS FOR GRADUATING: 4

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

THE COURSE HAS A STRONG APPLICATIVE APPROACH, INTRODUCING METHODS AND MODELS FOR OPTIMIZING REAL WORLS PROCESSES. APPLICATIONS IN FUNDAMENTING DECISIONS FOR PRODUCTION PROGRAMS, EFFICIENT USE OF RESOURCES, OPERATIONAL PRODUCTION PROGRAMMING, TRANSPORT AND DISTRIBUTION PROBLEMS, ELABORATION OF COMPETITIVE STRATEGIES.

4. NETWORKING AND INTERNET

HOURS: 56 OUT OF WHICH 28/COURSE AND 28/SEMINAR

CREDITS FOR GRADUATING: 4

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

UNDERSTANDING BY STUDENTS OF FUNDAMENTAL CONCEPTS REGARDING COMPUTER NETWORKS AND INTERNET INFRASTRUCTURE.

5. WEB APPLICATIONS PROGRAMMING

HOURS: 58 OUT OF WHICH 28/COURSE AND 28/LAB

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ENSURING THE PREPARATION OF STUDENTS FOR THE DESIGN AND CREATION OF WEB PAGES AS WELL AS THEIR INTEGRATION IN A DYNAMIC CLIENT-SERVER ARCHITECTURE. BASIC WEB CONCEPTS, HTML LANGUAGE, AS THE BASIC LANGUAGE USED FOR BUILDING WEB PAGES; USE OF SCRIPTING TECHNIQUE TO OBTAIN VIDEO/AUDIO EFFECTS.

6. BUSINESS ENGLISH COMMUNICATION I

HOURS: 42 OUT OF WHICH 14/COURSE AND 28/SEMINAR

CREDITS FOR GRADUATING: 3

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

STUDENTS' ACQUISITION OF ECONOMIC, POLITICAL, BANKING-FINANCIAL, ADMINISTRATIVE, BUSINESS LANGUAGE IN ENGLISH. ASSIMILATION OF GRAMMAR STRUCTURES OF THE ENGLISH LANGUAGE. ACHIEVING EFFICIENT, EASY, OPERATIONAL AND CREATIVE COMMUNICATION CAPACITY IN ENGLISH IN MANAGEMENT ACTIVITIES. ACQUISITION OF FLUENCE, SPONTANEITY, ACCURACY AND AUTONOMY IN ORAL AND WRITTEN BUSINESS COMMUNICATION.

YEAR III. SEMESTER 2 - 12 WEEKS

MANDATORY DISCIPLINES (D.O)

1. SOFTWARE PACKAGES FOR STATISTICS

HOURS: 48 OUT OF WHICH 24/COURSE AND 24/LAB

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

KNOWLEDGE OF THE BASIC NOTIONS REGARDING SOFTWARE PACKAGES AND THEIR MAIN FEATURES, AS WELL AS HOW TO USE PERFORMANT SOFTWARE PRODUCTS IN SOLVING ECONOMIC PROBLEMS. EFFICIENT USE OF SOFTWARE PACKAGES FOR SOLVING ECONOMIC PROBLEMS, APPLYING CONCEPTS, THEORIES, PRINCIPLES AND METHODS OF INVESTIGATING PHENOMENA AND PROCESSES IN THIS FIELD. DEVELOPMENT OF COMPONENTS FOR SPECIALIZED SOFTWARE PACKAGES, THROUGH THEIR OWN PROGRAMMING LANGUAGES.

2. INFORMATICS PROJECT MANAGEMENT

HOURS: 48 OUT OF WHICH 24/COURSE AND 12/ LABORATOR

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

ACQUIRING THE METHODOLOGY OF MANAGING IT PROJECTS/CONTRACTS. USING THE MICROSOFT PROJECT SOFTWARE FOR PLANNING AND MONITORING COMPUTER PROJECTS.

3. ECONOMIC PROCESSES MODELLING AND SIMULATION

HOURS: 36 OUT OF WHICH 24/COURSE AND 12/SEMINAR

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

THE COURSE, IN CLOSE CORRELATION WITH ECONOMIC-MATHEMATICAL MODELING, ADDRESSES THE PRACTICAL ASPECTS OF SIMULATION OF THE DYNAMICS OF PHENOMENA AND ECONOMIC PROCESSES FOR THE PURPOSE OF FUNDAMENTING DECISIONS AT MICROECONOMIC LEVEL.

4. ADVANCED WEB PROGRAMMING

HOURS: 36 OUT OF WHICH 24/COURSE AND 12/SEMINAR

CREDITS FOR GRADUATING: 5

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

THE DISCIPLINE PREPARES STUDENTS FOR THE DESIGN AND IMPLEMENTATION OF WEB PAGES AND APPLICATIONS AS WELL AS THEIR INTEGRATION INTO A DYNAMIC CLIENT-SERVER ARCHITECTURE. STUDY CASES.

5. BUSINESS ENGLISH COMMUNICATION II

HOURS: 36 OUT OF WHICH 12/COURSE AND 24/SEMINAR

CREDITS FOR GRADUATING: 3

EVALUATION PROCEDURE: EXAM

DISCIPLINE OBJECTIVES:

STUDENTS' ACQUISITION OF ECONOMIC, POLITICAL, BANKING-FINANCIAL, ADMINISTRATIVE, BUSINESS LANGUAGE IN ENGLISH. ASSIMILATION OF GRAMMAR STRUCTURES OF THE ENGLISH LANGUAGE. ACHIEVING EFFICIENT, EASY, OPERATIONAL AND CREATIVE COMMUNICATION CAPACITY IN ENGLISH IN MANAGEMENT ACTIVITIES. ACQUISITION OF FLUENCE, SPONTANEOUSNESS, ACCURACY AND AUTONOMY IN ORAL AND WRITTEN COMMUNICATION IN BUSINESS.

6. BACHELOR PAPER PREPARATION

HOURS: 24 OUT OF WHICH 24/PROIECTE

CREDITS FOR GRADUATING: 3

EVALUATION PROCEDURE: VERIFICARE

DISCIPLINE OBJECTIVES:

THE DISCIPLINE'S MAIN OBJECTIVE IS THE GUIDANCE AND SUPPORT OF STUDENTS FOR THE ELABORATION OF THEIR BACHELOR THESIS. STUDENTS HAVE THE OPPORTUNITY TO CARRY OUT MORE DOCUMENTATION WORK ON THE INTERNET, IN THE UNIVERSITY LABS, IN ORDER TO DESIGN, DEVELOP AND TEST THEIR SOFTWARE FOR THE BACHELOR EXAM.