CYQAA CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION

Doc. 300.1.2

Date: 7.6.2024

Higher Education Institution's

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Response

- Higher Education Institution: European University Cyprus
- Town: Nicosia
- Programme of study Name (Duration, ECTS, Cycle)

In Greek:

Μεταπτυχιακό στην Ανάλυση Χρηματοοικονομικών Δεδομένων και Αειφόρος Χρηματοοικονομική (24 Μήνες, 120 ECTS, Μάστερ, M.Sc.), Διαπανεπιστημιακό Πρόγραμμα Σπουδών με 1. European University Cyprus (EUC), 2. University of Pardubice (Pardubice, Czech Republic), 3. LUMSA University (Rome, Italy), 4. Vilnius University (Vilnius, Lithuania).

In English:

Master in Financial Data Analytics and Sustainable Finance (24 Months, 120ECTS, Master of Science), Joint Programme of Study with European University Cyprus (EUC), 2. University of Pardubice (Pardubice, Czech Republic), 3. LUMSA University (Rome, Italy), 4. Vilnius University (Vilnius, Lithuania).

- Language(s) of instruction: English
- Programme's status: New
- Concentrations (if any):
 In Greek: Concentrations
 In English: Concentrations



The present document has been prepared within the framework of the authority and competencies of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, according to the provisions of the "Quality Assurance and Accreditation of Higher Education and the Establishment and Operation of an Agency on Related Matters Laws" of 2015 to 2021 [L.136(I)/2015 – L.132(I)/2021].



A. Guidelines on content and structure of the report

- The Higher Education Institution (HEI) based on the External Evaluation Committee's (EEC's) evaluation report (Doc.300.1.1 or 300.1.1/1 or 300.1.1/2 or 300.1.1/3 or 300.1.1/4) must justify whether actions have been taken in improving the quality of the programme of study in each assessment area. The answers' documentation should be brief and accurate and supported by the relevant documentation. Referral to annexes should be made only when necessary.
- In particular, under each assessment area and by using the 2nd column of each table, the HEI must respond on the following:
 - the areas of improvement and recommendations of the EEC
 - the conclusions and final remarks noted by the EEC
- The institution should respond to the EEC comments, in the designated area next each comment. The comments of the EEC should be copied from the EEC report <u>without any interference</u> in the content.
- In case of annexes, those should be attached and sent on separate document(s). Each document should be in *.pdf format and named as annex1, annex2, etc.

ΔΙΠΑΕ ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ CYQAA CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION

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1. Study programme and study programme's design and development *(ESG 1.1, 1.2, 1.7, 1.8, 1.9)*

Areas of improvement and recommendations by EEC	Actions Taken by the Institution	For Official Use ONLY
Sustainability should be fundamental and core to the programme (as emphasised by external stakeholders).	In response to your suggestions, the consortium members have taken the following actions:	Choose level of compliance:
Participants should engage in applied sustainability projects and initiatives as part of their journey through the various partners. In fact, participants could consider using sustainable travel methods as they progress through the programme. This will also signal better the true sustainability values of the programme and its partners.	 Curriculum Integration: As mentioned during the evaluation day, all courses incorporate sustainability principles. This is sometimes directly reflected in the course titles and materials, as well as into the course content. This ensures that every participant understands and appreciates the importance of sustainability in their respective fields. Applied Sustainability Projects: Students will be required to engage in applied sustainability projects. These projects will be conducted in collaboration with our various partners, providing practical experience and tangible contributions to sustainable practices. It should be highlighted that all courses incorporate projects into their syllabi. Sustainable Travel Initiatives: The consortium members will encourage students to adopt sustainable travel methods throughout the delivery of program. This initiative includes incentives for using public transportation, carpooling, cycling, and other eco- friendly travel options. The consortium members believe this not only reduces our carbon footprint but also aligns with the core values of our sustainability agenda. 	
	These steps are designed not only to educate our students about sustainability but also to embed these values deeply into their professional and personal lives. The consortium members believe these measures will enhance the overall impact of our program and better prepare our	

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	graduates to be leaders in sustainable practices.	
Securing Erasmus Mundus funding for the programme would be a significant key to its success as it will enable participants to fund what is ultimately a relatively expensive educational journey (albeit with significant benefits).	The consortium members have already submitted the application for the Erasmus Mundus program and are expecting the results. The commitment for the Mundus submission is mentioned to the Consortium Agreement as well (please see Appendix 2, Section 3). The Erasmus Mundus application was eligible for submission since the three out of the four partner countries have already received national accreditation.	Choose level of compliance:
An internship, as an elective, would be a welcome addition to the programme as it would allow the students to connect theory and practice beyond case studies while boosting future employability opportunities. The strength of the external stakeholder panel that engaged on the visit suggests that this might be a possibility when the programme comes for its next review.	In agreement with the EEC recommendation, after consultations among all partner universities, the consortium members have decided to include the internship in the last semester, without this counting towards the 120 ECTS. For example, the University of Pardubice differentiates between A) courses (mandatory for every student), B) courses (electives), and C) courses (extra courses). Following this model, the universities will make all necessary arrangements for students to secure an internship during the fourth semester. This will not be compulsory, but it will be strongly recommended to students. Please note that during the last semester, students are required to complete their master thesis, so it is feasible to have an internship simultaneously. Each university will appoint a specific faculty member, and in collaboration with the career office, will ensure that all necessary actions are taken to promote and implement the internship scheme for students.	Choose level of compliance:
The number of programme learning outcomes should be reduced by aggregating them at a higher level of abstraction.	All the necessary adjustments have been made. Appendix 1 reflects the updated learning objectives of the programme. The learning objectives have been reduced by aggregating them to a higher level of abstraction.	Choose level of compliance:

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compliance:

The student record and data management task will be a significant challenge for the partner institutions and will require collaboration and cooperation from recruitment graduation processes to requirements. lt is recommended that this challenge be prioritised to ensure a positive partner and student experience.

To address this challenge effectively and ensure a positive experience for both our partner institutions and students, the consortium members have taken the following actions:

- 1. Collaborative Approach: The consortium members have established collaborative frameworks and communication channels among all partner institutions (see the consortium agreement already submitted Appendix 2, section 5, p. 5, section 6, p. 5-6, section 7, p. 6-7, section 11, p. 10-This allows for seamless 11). coordination and sharing of student records and data throughout the program duration.
- 2. Standardized Procedures: The consortium members have implemented standardized procedures and protocols for student record management, starting from recruitment processes to graduation requirements (see the consortium agreement alreadv submitted – Appendix 2, section 5, p. 5, section 6, p. 5-6, section 7, p. 6-7, section 8, p.7-8, section 11, p. 10-11). These procedures ensure consistency and accuracy across all partner institutions.
- 3. Dedicated Support Teams: Each partner institution has dedicated support teams responsible for overseeing student record and data management tasks. These teams work closely with program coordinators to address any challenges and ensure smooth operations.
- 4. Continuous Improvement: As this Joint Master program is forthcoming, the consortium members are committed to continuously monitor and evaluate these processes. The consortium members will promptly address any issues that arise and take appropriate action. Feedback from partner institutions and students will be regularly collected and incorporated into our improvement initiatives.



2. Student – centred learning, teaching and assessment (ESG 1.3)

Areas of improvement and recommendations by EEC	Actions Taken by the Institution	For Official Use ONLY
Consider setting some guidance on the level of supervision to be provided for the dissertation for all partners so that the students receive a similar level of support from all partner institutions.	The details concerning the thesis are outlined in the consortium agreement, primarily in sections 11.6, 11.7, 11.8, 11.9, and 12.5 (Appendix 2). Additionally, the consortium members have developed the Syllabus for the thesis (Appendix 3) and following the EEC recommendations we have incorporated this information in the Academic Staff Handbook (Appendix 4). Once more, since this Joint Master program is forthcoming, the consortium members are committed to continuously monitor and evaluate this process. We will promptly address any issues that may arise and take appropriate action as a consortium. Finally, feedback from partner institutions and tutors and students will be actively collected and incorporated into our improvement initiatives.	Choose level of compliance:
Clarify how resit exams are managed possibly to avoid additional travel costs, for example by setting up procedures for taking in-person and supervised resit exams at partner institutions (if this is allowed).	 If a student fails a course at a particular university (University A), the following actions will be taken by that university: 1. Online consultations between the student who failed and the tutor from University A will be arranged to address academic issues and resolve any material-related issues. It's important to note that the student who failed may already be located in another country. 2. While the student is attending courses at another university (University B), they will take the resit exams face-to-face in University B. The exam paper 	Choose level of compliance:

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	 will be sent from University A to University B by email. The student will be situated in a designated room where a local tutor will act as a supervisor, ensuring academic integrity through a local "proctoring" system. 3. Finally, University B will scan the exam paper and the student's answers and send them to the responsible tutor at University A. The paper will also be sent by mail to be archived. This approach aims to facilitate the student's academic progress while avoiding any additional costs. 	
Consider providing logistic guidelines and even cost estimates for self-funded students.	All relevant information can be found in the Student Manual (Appendix 5). Through this manual, potential students can access details regarding living expenses in each country, fee information, conduct guidelines for each university, travel schedules, accommodation information, and more. At the same time, the international office/services of each University and the local programme coordinator will facilitate this procedure.	Choose level of compliance:

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3. Teaching staff (ESG 1.5)

Areas of improvement and recommendations by EEC	Actions Taken by the Institution	For Official Use ONLY
recommendations by EEC Incentivise more staff members of the different partner institutions to engage in mobility programmes, especially linked to this joint master programme.	 Actions Taken by the Institution To achieve this goal, the consortium members have planned to implement the following strategies: 1. Promotion of Mobility Opportunities: The consortium members will actively promote further to the existing mobilities, the benefits of mobility programs among staff members, highlighting the professional development opportunities, research opportunities, cultural exchange, and networking advantages associated with participation. 2. Financial Support: Travel and accommodation expenses will be covered by the Erasmus Exchange scheme. It should be highlighted that all four universities have already signed Erasmus Bilateral Agreements and have already used this scheme for teaching and training. Finally, the teaching fees will be covered as mentioned in the agreement (please see Annex 4 in Appendix 2). 3. Recognition and Career Advancement: The consortium members will ensure that participation in mobility programs is recognized and valued within the career advancement framework of our institutions. This may include incorporating mobility experiences into performance evaluations and providing opportunities for professional growth based on international experiences. 4. Collaborative Projects: The consortium members to engage in collaborative projects or research initiatives with counterparts at partner institutions. during their mobility 	Choose level of compliance:
	periods. This will foster interdisciplinary	

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4. Student admission, progression, recognition and certification (ESG 1.4)

Areas of improvement and	Actions Taken by the Institution	For Official Use
Partner HEIs should continue to liaise with industry stakeholders which can contribute to further enhance the programme design and module content, to provide funding and scholarships, and may contribute to seminars and other academic activities. This can improve the employment opportunities for students and increase access to talent for employers. Furthermore there is an	Industry stakeholders are key participants in this Joint Master program. They played a significant role in its conception and creation and their comments and advice throughout the development process were invaluable (please see Appendix 6, which includes letters from industry stakeholders who strongly support the creation of this Joint Master program). Additionally, European University Cyprus (EUC) quality assurance procedures prioritize input from industry experts (see Appendix 7).	Choose level of compliance:
opportunity to leverage industry links to develop an internship programme.	In addition, the partner Higher Education Institutions (HEIs) are dedicated to further strengthening the programme's ties with industry stakeholders. This collaboration will go beyond mere consultation; the consortium members aim to actively involve industry partners in providing funding and scholarships, as well as contributing to seminars and other academic activities.	
	By leveraging the expertise and resources of industry stakeholders, the partners enrich the curriculum with real- world insights, practical experiences, and cutting-edge developments. This not only enhances the educational experience for our students but also ensures they are equipped with skills and knowledge directly relevant to industry needs.	
	Moreover, fostering strong ties with the industry creates pathways for students to explore internship opportunities. These internships provide invaluable experiential learning, allowing students to apply their knowledge in real-world settings, gain practical skills, and build professional networks. Industry-linked	

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	internships also increase graduates' employability, providing first-hand experience and exposure to potential employers. In summary, by continuing to liaise with industry stakeholders, the programme is enriched and employment opportunities for our students are enhanced while providing access to talent for employers. The consortium members are committed to leveraging industry links to develop internship programs that further strengthen the connection between academia and the professional world, benefiting both our students and industry partners.	
Some degree of flexibility in the admissions process could be considered to allow non- conventional applicants an opportunity to gain access. For example, potential participants that are self-taught on coding and other areas of computer science, or others with non- conventional academic CVs.	The consortium members appreciate this suggestion regarding flexibility in the admissions process to accommodate non-conventional applicants, such as those who are self-taught in coding or possess non-traditional academic backgrounds. Through the interview process (Annex 3 in Appendix 2), the consortium members ensure that these characteristics and points are taken into consideration. However, it's crucial to ensure that our admissions procedures adhere to the regulations set forth by the Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CY.Q.A.A.). Therefore, we will carefully consider this recommendation while ensuring compliance with all relevant regulations to maintain the integrity and quality of our program.	Choose level of compliance:
Clarity is required on the ability of participants with deficient grades to progress from one partner University to another. How will repeat/resit mechanisms work? Also, is there a mechanism to identify "students at risk" in terms of poor academic performance.	Please refer to our response regarding resit exams as mentioned in section 2, page 6. Additionally, it should be highlighted that the consortium members have an existing mechanism in place to identify "students at risk" in terms of poor academic performance. Our tutors are trained to recognize when a student is facing difficulties, and they intervene	Choose level of compliance:

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	directly to find solutions. Furthermore, the coordinator of the program closely monitors the progress of the students and intervenes if any issues are detected. This proactive approach ensures that students receive the necessary support to succeed academically.	
The adopted policy for student progression (from year 1 to year 2 and for graduation) should be clarified and explicitly communicated to students. Similarly, clarification is required on award classifications.	 To address this recommendation, the following approach will be taken at the University of Pardubice which is the starting point for all students: 1. Clarification of Student Progression Policies: Induction Week Presentation: During Induction Week, a detailed presentation will be given to all new students explaining the criteria for progression from year 1 to year 2 and for graduation. This presentation will cover: A step-by-step guide on the progression process. The required number of credits per academic year. Minimum grade requirements for each course. Any mandatory courses that must be completed. Policies on retaking failed courses and the process for doing so. The Student Manual, will be distributed. Examples of progression pathways. Contact information for academic advisors and support services. 2. Clarification of Award Classifications: Induction Week Briefing: Award classifications will be explained during Induction Week through a specific briefing session. This session will detail: 	Choose level of compliance:

ο φορεάς διασφαλίσης και πιστοποίησης της ποιοτητάς της ανωτέρης εκπαίδευσης

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	Committee, Scholarship Selection Committee, and Examination Committees. Although all the details are included in the Consortium agreement, if there is a need for adjustments, the committees will act accordingly.	
There is some uncertainty around the graduation arrangements. Some of the programme information suggests graduation can take place at a preferred partner university but elsewhere it suggests that graduation will take place at the coordinating university.	That mistake was a typo and has been corrected. It is clarified here that the award ceremony will take place at the coordinating institution (University of Pardubice), and representatives from all other partner universities may attend. (Please see Appendix 2, Section 14.1, and Appendix 5, Page 29.)	Choose level of compliance:



5. Learning resources and student support (ESG 1.6)

Areas of improvement and	Actions Taken by the Institution	For Official
recommendations by EEC	Fotoblicking Preserve Ocementication	Use ONLY
Although the Universities informed the EEC of their plan for sharing student information, it is recommended that they have proper communication	 Establishing Proper Communication Channels and Procedures: Communication Channels: From the start of the programme, clear and secure communication channels will be 	of compliance:
channels and procedures in place from the start of the programme. If we consider the case of students with special needs and take for example	 involved. These channels will facilitate the efficient and confidential sharing of student information. This will include: Dedicated contact points at each 	
students who are being monitored by a university psychologist, there should be a	 university for handling student information. Secure email systems and approximated data transfer methods. 	
share this personal information with relevant advisors at other	 Procedures for Information Sharing: Detailed procedures will be put in place to guide the sharing of student 	
to the EEC that with the student's consent this information can be passed to	information (please see Appendix 8, and Appendix 10). These procedures will cover:	
other universities.	 The steps for obtaining and documenting student consent The specific types of information that can be shared. 	
	 The process for transferring information securely between institutions. 	
	GDPR Compliance and Handling Sensitive	
	Information: • GDPR Compliance: A GDPR-	
	compliant process will be strictly followed to ensure the protection of personal data. This includes:	
	 Ensuring that the GDPR document will be signed promptly upon the accreditation of the 	
	Programme (please see Appendix 9).Using secure systems for storing	
	and sharing personal data.	
	For students with special needs, particularly	

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	 those being monitored by a university psychologist, the following steps will be taken: Consent Forms: Obtain explicit consent from the student for sharing their information with relevant advisors at other institutions. Consent forms will clearly explain what information will be shared, with whom, and for what purpose (please see Appendix 11,12,13). 	
The EEC was informed about the teaching platforms each university uses. All the universities use different platforms, with most of them using Moodle. Therefore, each time a student changes a university there's a need for the use of a new platform. A suggestion of the EEC would be to give proper orientation to each student for the platforms being used in each of the universities, to help them adapt more easily and effectively. For example, if a student transfers from EUC, which uses Blackboard, to LUMSA, which uses Moodle and VALSTAT, the student should be provided proper guidance on how to use Moodle and VALSTAT platform.	 To address the EEC's recommendation regarding the need for proper orientation for students on the different teaching platforms used by each university, the following actions will be taken: 1. Orientation on Teaching Platforms: Initial Orientation Sessions: During the initial orientation week at each university, dedicated sessions will be provided to introduce students to the specific teaching platforms used. These sessions will include A) Overview of Platforms, and B) Hands-On Training. 2. Ongoing Support and Resources: Online Tutorials and FAQs: Develop and maintain an online repository of tutorials, video guides, and FAQs for each platform. These resources will be accessible at any time and will include step-by-step instructions and troubleshooting tips (please see the link: https://euc.ac.cy/el/online-learning-transition/). Helpdesk Support: Ensure that each university has a dedicated helpdesk or support team that students can contact for immediate assistance with platform-related issues. 3. Feedback and Improvement: Student Feedback: Regularly collect feedback from students about their experiences using the teaching 	Choose level of compliance:



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	 platforms and the effectiveness of the orientation sessions. This feedback will be used to continuously improve the training and support provided. Review and Update: Periodically review and update the orientation materials and support processes to reflect any changes or upgrades to the teaching platforms. 	
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6. Additional for doctoral programmes

(ALL ESG)

N/A

Areas of improvement and recommendations by EEC	Actions Taken by the Institution	For Official Use ONLY
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7. Eligibility (Joint programme) (ALL ESG)

Areas of improvement and recommendations by EEC	Actions Taken by the Institution	For Official Use ONLY
An agreement for sharing information across institutions has already been prepared and should be signed by all partner institutions.	The drafted GDPR document has been reviewed and finalized. This will be signed upon the accreditation of the program (please see Appendix 9).	Choose level of compliance:
Clear procedures for dealing with resit examinations that are in line with local requirements and programme regulations should be added to the programme information.	Please see our response in part 2 – (Student - centered learning, teaching, and assessment). Please also note that at the same time, this information is added into the Student Manual (Appendix 5, page 29). Finally, this information will be provided to students during the induction week described in more detail above.	Choose level of compliance:



B. Conclusions and final remarks

Conclusions and final remarks by EEC	Actions Taken by the Institution	For Official Use ONLY
The number of programme learning outcomes may be reduced by aggregating them at a higher level of abstraction.	Please see our response in section 1, page 4.	Choose level of compliance:
Sustainability could be fundamental and core to the programme with specific initiatives and dedicated actions across the activities.	Please see our response in section 1, page 3.	Choose level of compliance:
An elective internship would be a welcome addition to the programme.	Please see our response in section 1, page 4	Choose level of compliance:
The student record and data management require collaboration and cooperation and should be prioritised.	Please see our response in section 1, page 4	Choose level of compliance:
Explicit guidance on the level of supervision to be provided for the dissertation should be provided to all partner institutions and communicated to staff members and students.	Please see our response in section 2, page 6.	Choose level of compliance:
If allowed by the national regulations, resit exams should be organised and managed in such a way to avoid additional travel costs to the students.	Please see our responses in sections 2,4,7, page 6,10,16, respectively.	
Actions to incentivise more staff members of the different partner institutions to engage in mobility could be introduced.	Please see our response in section 3, page 8.	
In addition to an agreement on data sharing that is going to be signed, proper communication channels should be put in place from the beginning of the programme.	Please see our response in section 5, page 13.	

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The adopted policy for student progression (from year 1 to year 2 and for graduation) should be clarified and explicitly communicated to students. Similarly, clarification is required on award classifications from the awarding institution for graduates.	Please see our response in section 4, page 10.	
Some orientation should be given to students for the digital platforms being used in each of the universities.	Please see our response in section 5, page 14.	



C. Higher Education Institution academic representatives

Name	Position	Signature
Dr. Alexios Kythreotis	Program Coordinator	Alexios Kythreotis (Jun 6, 2024 17:03 GMT+3)
Dr. Simona Mihai	Chairperson, Department of Accounting, Economics and Finance	<u>Simona Mihai-Yiannaki</u> Simona Mihai-Yiannaki (Jun 6, 2024 21:00 GMT+2)
Dr. Pieris Chourides	Dean, School of Business Administration	P.Ch P.Ch (Jun 7, 2024 07:40 GMT+3)

Date: 7.6.2024



Appendix 1 - Intended learning outcomes in accordance with the European qualification's framework

To aggregate the learning outcomes at a higher level of abstraction, we have grouped related outcomes together:

Knowledge:

A graduate of the master's study program demonstrates broad knowledge of:

- Comprehensive understanding of financial and economic concepts, innovation, and sustainable finance.
- Advanced methodologies for economic and financial analysis, including statistical, econometric, and big data analytics.
- Proficiency in information technologies and software for analytical, presentation, and management activities.
- Deep knowledge of European values, EU financial legislation, and research methodologies.

Skills:

A graduate of the master's study program demonstrates broad knowledge of:

- Ability to evaluate organizational performance and solve complex finance problems using advanced technology and data analytics.
- Critical assessment of finance and data analytics frameworks, applying both quantitative and qualitative analysis.
- Proficient use of IT and software for various organizational tasks.

Competences:

A graduate of the master's study program demonstrates broad knowledge of:

- Capability to solve problems in dynamic environments, conduct original research, and innovate sustainably.
- Leadership and coordination of team activities, making responsible decisions, and effectively communicating solutions.
- Commitment to ethical problem-solving and continuous professional development.

Additionally, depending on the specialization chosen, graduates of the master's study program will demonstrate knowledge of:

Corporate Finance Specialization:

- Expertise in promoting digital finance innovation.
- Proficiency in managing financial risks.
- Ability to make sustainable finance decisions.

Financial Markets Specialization:

• Skills in technical analysis.

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- Knowledge of sustainable investment practices. Competence in integrating ESG (Environmental, Social, and Governance) factors. •

Appendix 2 Findata Consortium Agreement







FINDATA CONSORTIUM AGREEMENT

on Joint Master's Study Programme

FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE

covering all academic, operational, administrative, and financial aspects related to the implementation of the programme.

FINDATA CONSORTIUM AGREEMENT

UNIVERSITY OF PARDUBICE (UPCE),

Faculty of Economics and Administration a higher education institution established by law established in Studentska 95, PARDUBICE 532 10, the Czech Republic, Identification Number: 00216275, VAT Number: CZ00216275 PIC: 999453663 represented by Prof. Ing. Libor Čapek, Ph.D., rector hereinafter referred to also as the "Coordinator",

and

European University – Cyprus Ltd.

a higher education institution established in: 6 Diogenes Str., Nicosia, Post Code: 1516, Cyprus Identification number: E10208383, VAT number: 10083353J Account number: 357009812755 IBAN: CY16002001950000357009812755 BIC/SWIFT Code: BCYPCY2N; Bank: Bank of Cyprus PIC: 999739619 Represented by Dr. Christoforos Hadjikyprianou, CEO and President of the Council, hereinafter, referred to also as "Partner University"

and

LIBERA UNIVERSITA ' MARIA SS ASSUNTA – LUMSA

Department of Law, Economics, Politics and Modern Language a higher education institution established with royal decree of 26 October 1939, n. 1760 established in: Via della Traspontina 21, 00193 Rome Identification number: 02635620582, VAT number: 01091891000 Account number: SWIFT BCITITMM; IBAN: IT43S0306905238100000001983 Represented by Sua Em.za Rev.ma Cardinale Giovanni Lajolo, Chair of the Board of Governors hereinafter, referred to also as "Partner University"

and

VILNIUS UNIVERSITY

Status: Public institution Address: Universiteto g. 3, LT-01513, Vilnius, Lithuania Identification Number: 211950810, VAT Number: LT119508113 Account number: LT32 7300 0100 0246 2504 Represented by Prof. Dr. Rimvydas Petrauskas, Rector hereinafter, referred to also as "Partner University",

the Coordinator and the other Partner universities are hereinafter, jointly or individually, referred to as "Parties" or "Party" or "Partner Universities",

have entered into the FINDATA Consortium Agreement on joint master's study programme *Financial Data Analytics and Sustainable Finance* implementation (hereinafter also the "Agreement") under the following conditions as set below.

Preamble

The Parties to this Agreement altogether forming the Consortium, having considered:

- \checkmark the advantage of joining forces in the creation, dissemination, and application of knowledge,
- \checkmark the usefulness of sharing their experiences and strengths as innovative institutions,
- \checkmark the chance of mutually enhancing the quality of teaching and research,
- \checkmark the good experience with the existing joint and double degree programmes they are already running,
- ✓ the success of their grant application to EACEA resulting in obtaining the ERASMUS Mundus Design Measures grant for FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE design of a joint degree master study programme by four universities from EU member states PROJECT NUMBER: 101082507,

intend to continue their cooperation and after the accreditation of the study programme FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE ("FINDATA" in short) by all Parties to run the FINDATA together and jointly as a successful Master study programme.

This Agreement is intended to cover all academic, operational, administrative, and financial aspects related to the implementation of the FINDATA Joint Master study programme.

1. FINDATA Study Programme

- 1.1. The Coordinator together with the three Partner universities have jointly developed the Joint Masters study Programme "FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE" leading to a commonly conferred and recognized Joint Master's degree and diploma (hereinafter the "FINDATA programme"). The aim is to provide full joint degree awarded by all four Partner universities to successful graduates.
- 1.2. The aim of the FINDATA study programme is to educate highly qualified experts in the field of finance and data analytics, i.e., graduates equipped with knowledge of key financial and economic disciplines with emphasis on environmental, social and governance (ESG) considerations. The FINDATA programme objective is to provide its graduates with systematic knowledge not only of finance but also of advanced technological applications, so that they will be prepared to face the challenges associated with constant developments in financial technology.
- 1.3. All the Parties wish to implement the FINDATA programme according to the best available practices and for these purposes thy are creating a Consortium.
- 1.4. The FINDATA programme is designed to make the best use of the specific expertise available at each Partner University. It shall enable each student to profit from the best education and supporting services each Partner offers, and to enable each student to gain experience in different international environments.
- 1.5. The FINDATA programme language is English. The study field is economics / finance completed by informatics.
- 1.6. The FINDATA programme comprises 120 ECTS credits, which correspond to a period of study of 4 semesters or 2 years. The study form of the FINDATA programme is full time. The students are obliged to study at least in three of the Partner universities, the details are set in Annex 1 to this Agreement.
- 1.7. Two specialisations are offered to the students to choose within the FINDATA programme (a) Corporate Finance, and (b) Financial Markets. Each student chooses his specialisation according to his/her preference and also to the capacities of the partner universities. Both of them are equal and lead to the joint diploma provided together by the four Partner universities. Approximately one half of students is expected to study each specialisation.
- 1.8. Student and staff mobilities are integral parts of the FINDATA programme. Each student must spend a semester at least with three out of the four Partner universities.
- 1.9. Unless agreed differently (for the students outside the EMJM grant) students of the FINDATA Programme shall be included into lists of students of all Partner Universities,

registered in Registers of Students of all the countries, indicating the mode of a joint study programme.

- 1.10. Students are provided with opportunities to use facilities and learning resources of all Partner Universities and the system of support to students valid in the respective country of their stay, if any, (discounts for public transportation etc.) at equal rights.
- 1.11. The exact beginning and end of the academic year, the vacation time meet the order of the Partner University students of the FINDATA Programme are studying with during the relevant semester. The Partner Universities should use all their endeavours to leave enough space for exams between the semesters taking into account the travel needs of the students.
- 1.12. Timetables of lectures for the respective semester are formed by each Partner University. Students cannot have more courses at the Partner University than 40 hrs per week.
- 1.13. Teachers' workload is planned, and wages are paid in that Partner University, where the teacher is employed.

2. Aim of the Agreement

2.1. The aim of this Agreement is to specify the terms under which students in the FINDATA may be granted, upon successful fulfilment of all requirements, the academic joint master degree in the respective field of study. Moreover, the Agreement covers the quality assurance, selection procedures, payments and other details of the FINDATA study programme. The Consortium relationship with the individual students is covered in a separate agreement (Joint Degree Student Agreement).

3. ERASMUS Mundus Joint Masters Application

- 3.1. The Parties, particularly in an effort to provide a quality label that will help make the programme attractive to applicants from different countries around the world, intend to seek support from the EU ERASMUS Mundus Joint Masters grant (hereinafter the "EMJM" only). They wish to apply for the grant in February 2024. The Coordinator will prepare the application and all the other Partner universities will provide their full support.
- 3.2. Shall the EMJM grant application be successful, the Parties shall perform and complete their share of the FINDATA programme activities in accordance with the requirements set out in the agreement between the Coordinator and the EACEA. Each Partner shall carry out the work in such a way that no act or omission in relation thereto shall constitute, cause, or contribute to any breach or non-compliance by the Coordinator or by other parties of any of their respective obligations under the contract between the Coordinator and the EACEA.
- 3.3. The Parties hereby declare their intention to run the FINDATA programme even if the above described EMJM application is not successful. The tuition is covered in Sec. 9 the Agreement and the Parties will seek other opportunities for scholarships. Moreover, they will apply for the EMJM grant also in the following years.

4. Governance of the Consortium and Cooperation between Partner Universities

- 4.1. The co-ordinating institution of the Consortium is University of Pardubice, the Coordinator.
- 4.2. The Coordinator coordinates the Consortium and acts on behalf of all Consortium institutions (Partner Universities) in matters concerning the FINDATA study programme. The Coordinator is responsible for FINDATA study programme management, including financial management. All Partner Universities cooperate on the operation of the FINDATA study programme including inter alia, the admission procedure, teaching activities together with examining, quality assurance, student support, internship organisation (if applicable), thesis supervision and reviews and final exams including thesis defence. The successful operation of the programme includes regular consultations among the four Directors and the annual meetings of the Programme Steering Committee (according to Sec. 6)

4.3. All Partner Universities will ensure that the academic and administrative staff dealing with the FINDATA study programme activities described above will be chosen with the utmost diligence so that the highest possible quality is granted and that this staff will be provided special financial benefits as share of the EMJM grant and/or student tuition unless the university rules prohibit such approach.

5. Obligations of the Parties

- 5.1. The Parties agree to distribute the administrative work between the partners. Each Partner University will be in charge of a certain assignment, according to prior experience and local capacities as follows.
- 5.2. The Coordinator is obliged to:
- ✓ FINDATA programme coordination, prepare meetings and secure follow up, represent Consortium towards EACEA (including reporting), coordinate selection of students,;
- ✓ keep record of students transcripts and issue and register the final degree;
- ✓ be responsible of the financial management of the ERASMUS+ grant and distribution of tuition fees generated by the FINDATA programme;
- ✓ coordinate quality assurance at institutional level / continuous improvement of the course (including evaluation, setting up the Joint Management Steering Committee, preparing reports on Quality Assurance (QA) and student performance);
- ✓ coordinate promotion and marketing, including creation of appropriate materials (leaflets, adds), participation in fairs, etc.;
- ✓ set up and maintain FINDATA programme website;
- ✓ contribute to the curriculum content and delivery, including monitoring of balanced use of different teaching and learning methods under the responsibility of the Joint Management Steering Committee.
- 5.3. The other three Partner universities are each individually obliged to:
- ✓ keep record of students' transcripts and issue and register the final result of each exam taken at the respective Partner University;
- ✓ coordinate quality assurance at their institution level / continuous improvement of the course (including evaluation, preparing reports on QA and student performance);
- ✓ contribute to curriculum content and delivery, including monitoring of balanced use of different teaching and learning methods;
- ✓ participate in selection of students, selection of scholarships, and guest lecturers for programme-specific curricular elements;
- ✓ provide administrative and academic support to the FINDATA programme and its students;
- ✓ provide support to the Coordinator so that the Coordinator may meet the commitments set out above in Sec. 5.2 of this Agreement.

6. Administration of the FINDATA Programme and Structure of its' Organisation

- 6.1 The FINDATA Programme is administrated by the Joint Management Steering Committee and Board of Directors. They are supported by the Admission Committee, Scholarship Selection Committee and Examination Committees.
- 6.2 The Coordinator nominates the **Consortium Director.** Each other Partner University appoints a local **Director**. Each Partner University may change its Director as it deems necessary or appropriate. Each Partner University is obliged to inform about the changes of the Director all the other Partner Universities. Together the four Directors form the **Board of Directors**.
- 6.3 The **Joint Management Steering Committee** consists of the Directors, the local FINDATA programme coordinators (guarantors) and further members. At least one student of the FINDATA Programme shall be selected by all the students to represent them at the meetings and be a full member of the **Joint Management Steering Committee**. As soon as applicable at least one alumni shall be appointed by the Board of Directors to become a full member of the

Joint Management Steering Committee. Other individuals invited by the Partner Universities can take part in the meetings of Joint Management Steering Committee as guests.

- 6.4 The decisions are taken by majority, in the event of a tie, the vote of the Consortium Director shall be decisive.
- 6.5 The Joint Management Steering Committee's role is to discuss the strategic issues of the FINDATA programme and determine its main direction and development. Thus, its functions are mainly to: 1) propose amendments to the Agreement between the Partner Universities on the Programme performance when necessary; 2) coordinate and provide suggestions on the student admission to the FINDATA Programme; 3) submit proposals to responsible bodies of the Partner Universities concerning tuition fees, considering the legislation of the countries and internal university regulations; 4) provide suggestions, concerning the distribution of the finances of the Programme; 5) take final decisions in matters submitted to it be the Board of Directors.
- 6.6 The Joint Management Steering Committee's shall meet at least once during the academic year. The meetings are held in any of the Partner Universities or in a distance mode facilitated by video conferencing technologies. It is allowed to express the opinion and vote by electronic means. In the case of equality of votes the final decision is made by the chair of Joint Management Steering Committee. The secretary of the Joint Management Steering Committee shall be selected at its first meeting. He/she is responsible for the reports and records of the meetings.
- 6.7 The **Board of Directors** consists of four members the Consortium Director and three local Directors (Current members are listed in Annex 2). It manages the administration of the Consortium including financial management, the daily operation of the FINDATA programme, and solves issues that may arise in the course of studies as it is the executive body of the Consortium. The members of the Board of Directors gather at regular meetings (at least once per semester). The meetings shall be held on/line unless it is possible to meet in person. Shall any of the Directors feel the need to discuss an issue related to the FINDATA Programme a meeting shall convened within a reasonable time period. They decide on the admission of students and on scholarships. The decisions are taken by majority, in the event of a tie, the vote of the Consortium Director shall be decisive.
- 6.8 The Admission Committee is appointed by the Board of Directors from academic staff of all Partner Universities. It guarantees the admission process and proposes a list of students to be admitted in each intake to the Board of Directors. The formal procedure of admission as described in Sec. 8 will follow.
- 6.9 The **Scholarship Selection Committee** is appointed by the Board of Directors from academic staff of all Partner Universities. It proposes a list of students to be granted the EMJM scholarship according to its rules for each intake to the Board of Directors.
- 6.10 The **Examination Committees** are set up for each final leaving exams and Masters' thesis defence. They are composed according to the internal rules of the partner University where the final leaving exams or master thesis defence take place. Moreover, they need to include one academic from each Partner University. These members may be present on-line, however they must be able to ask questions and have a vote on the final result. The members shall be appointed by the dean of each Partner University upon the request of the Partner University organising the final leaving exams or the Master thesis defence.

7. Quality Assurance

7.1. Quality assurance shall be considered both at local and consortium level. Each Partner University carries out the FINDATA Programme assessment and accreditation procedures in collaboration with all other Partner Universities taking into consideration the different legislative requirements of the countries.

- 7.2. At local level the quality of the FINDATA programme is ensured through internal systems for quality assurance in studies at all Partner Universities. Education Quality Assurance Committees of each Partner University working under the local legislative requirements and internal rules of the Partner Universities shall monitor the quality of the education in the FINDATA Programme, based on formal evaluations of the education anonymously filled out by the students and other available data. In addition to the written student evaluation after the end of the semester the lecturers will be stimulated to hear the voice of the students personally already during the course of the semester. Lecturers are also expected to react if some aspects of their courses are not evaluated positively by the students.
- 7.3. The coordination of study process in each Partner University is delegated to the FINDATA **Programme Guarantor** appointed for the purposes of accreditation procedure by each Partner University.
- 7.4. The **Programme Guarantor** informs and consults students and lecturers on the issues, related to the study documents, organisation of study process and students' and teachers' residence during their mobility, etc. He/she also provides the information about the FINDATA Programme implementation to the **Board of Directors.**, participates in its meetings and quality assurance events.
- 7.5. Quality assurance deals with individual courses (e.g. content relevance, quality of course material, effectiveness in training the targeted skills), lecturers, composition of the programme, difficulties arising from mobilities (issues of examinations and teaching schemes), facilities provided by the Partner Universities to the students.
- 7.6. Globally at the consortium level, the implementation of Programme's goals, permanent supervision and improvement of quality assurance of the Programme, is realized by the **Joint Management Steering Committee.** Its role is to ensure the overall quality of the FINDATA Programme and that the FINDATA Programme curriculum responds to the needs of students, and the labour market. Implementing these functions, the **Joint Management Steering Committee** collaborates with the **Board of Directors.**
- 7.7. Shall there be different approaches to quality assurance issues at the local level, the final decisions, concerning the quality assurance issue of the FINDATA Programme at the consortium level, are made by the **Board of Directors.** It shall be informed by the Director of the respective Partner University shall its Education Quality Assurance Committee have any concerns or raise issues regarding the quality of the FINDATA programme. The Board of Directors needs to decide in accordance with the legislation applicable at the Coordinator and other Partner Universities.

8. Conditions and Procedure of Student Admission

- 8.1. Admission procedure is administered by the Coordinator with the support of all Partner Universities. Applications to the FINDATA Study Programme shall be submitted via online platform run by the Coordinator before the end of the application deadline.
- 8.2. Admission to the FINDATA Study Programme proceeds on the ground of admission criteria established by the Consortium and selection run by the Consortium. The selection of applicants is through a common decision of the Consortium agreed by the **Admission Committee**. The regulations of the Coordinator and Czech law on administrative procedure granting rights to applicants apply to admission procedure unless agreed differently in the Agreement. The administrative proceedings (issuance of the final administrative decision granting rights to study / rejection of application) shall be run by Coordinator according to the legislative requirements set in the Act No. 500/2004 Coll, on Administrative Proceedings providing for rights of the applicants such as appeal. However, the Coordinator shall issue the official administrative decision on student admission only in line with the common decision of the Consortium (shall admit the students selected by the respective Consortium bodies).

- 8.3. The selection of successful applicants will be organized by all Partner Universities together (the Consortium). The detailed admission criteria will be stipulated by the **Board of Directors** in cooperation with all Partner Universities. Unless there is a change, the criteria used for the previous year shall apply.
- 8.4. A maximum of fifty students per academic year may participate in the FINDATA Study Programme unless agreed differently. This number includes both paying and EMJM grant students.
- 8.5. To be eligible for admission to the FINDATA study programme, students must have graduated from a bachelor degree study programme, demonstrate English language proficiency and meet the other admission criteria agreed to by the Parties. Students who have not yet finished bachelor degree may be eligible for admission to the FINDATA study programme through the selection process, under the conditions that they obtain this bachelor degree before enrolling in the FINDATA Study Programme.
- 8.6. To enter the FINDATA Study Programme, candidate must have at least academic Bachelor degree (minimum of 180 ECTS credits) in either Economics, Finance, Business Administration or similar fields od education, or in IT, Engineering, Technical Science, mathematics, Physics, Chemistry or similar fields of education with sufficient knowledge of mathematics. The applicant must have a sufficient level of English of at least B2, or at least 1 academic year of comprehensive English instruction.
- 8.7. The admission procedure is two-round. In the first round, the applicants are ranked on the basis of their results in the previous level of study, motivation (motivation letter) and letters of recommendation. Representatives of all Partner Universities evaluate each applicant independently, and the final ranking is the average of these rankings. Candidates not fulfilling the criteria set out in Sec. 8.5 will receive 0 points and will not be evaluated in the first round. In the second round, the top-ranked students are invited to an online interview, which is attended by representatives of at least two Partner Universities for each individual student. The final ranking of the applicants is determined by the results of both the first and second rounds.
- 8.8. The detailed admission criteria for the academic year 2024/2025 are set in the Annex 3. Detailed admission criteria for the following periods will be approved annually by the Programme Board. They will be communicated on the Programme's and Partner Universities' websites in time to attract the applicants.
- 8.9. The results of the selection procedure are provided to the Coordinator. The formal admission decision as described in Sec. 8.2 is sent to every applicant by the Coordinator and signed by the dean of the Faculty of Economics and Administration (UPCE). The decision will be issued in accordance with Czech legislation. The Coordinator shall inform all other Partner Universities that the admission decisions have been issued and which selected applicants have been enrolled into the FINDATA Study Programme.
- 8.10. Applicants become students of the FINDATA Study Programme on the day of enrolment in studies at the Coordinator. In addition, every FINDATA student shall be enrolled locally by each Partner University where he/she spends one semester within one week after his/her arrival. The Partner Universities may agree differently regarding the students not eligible for the EMJM grant in order that these students may apply for the ERASMUS student mobility grant.
- 8.11. The Coordinator will exchange information with Partner Universities on admitted and enrolled students without delay. The Parties undertake to exchange regularly, at least twice a year at the end of each semester, the related information about students enrolled in the FINDATA study programme, including the transfer of records and study documentation. The Parties will immediately exchange information of high importance, e.g. a student's interruption of study, disciplinary issues and procedures, or procedures leading to termination of a student's study. The Parties will ensure that any transfer of information takes place only if permitted by the respective data protection regulations and is managed in accordance with those regulations.

A separate agreement on data protection between all Partner Universities will set the detailed obligations.

9. Tuition Fees and Scholarships

- 9.1. The tuition fee for the FINDATA Programme is EUR 6,000 per academic year. The tuition fee is expected to change during time and shall be adjusted by the **Joint Management Steering Committee**, in consultation with the authorities of the Partner Universities. The amount of tuition fee will be announced in a timely manner on the FINDATA programme website and the websites of all Partner Universities.
- 9.2. The tuition fees of all students are paid to a separate account of the Coordinator reserved to FINDATA Consortium. The distribution of the tuition fees amongst the partner Universities is agreed in Sec. 10 of this Agreement.
- 9.3. The tuition fees cover the FINDATA Programme courses, institutional enrolments, insurance and extra costs for organising the programme. The students need to cover their living, travel and subsistence costs. The Partner Universities shall provide help to students looking for grants to cover their mobilities.
- 9.4. The students may apply for the FINDATA EMJM grant monthly allowance directly to the Consortium. The Consortium (**Board of Directors** upon the recommendation of the **Scholarship Selection Committee**) shall select the eligible students upon the conditions set by the EMJM grant and the agreement with the EACEA. Shall a student receive the EMJM scholarship, he/she shall pay no tuition as set in par. 1 of this Section nor any other payments to the Partner Universities or Consortium (this does not apply to living costs such as payments for dormitories, meals and the university canteen etc.). The EMJM scholarship holder may not receive more than 24 monthly scholarship payments and after the period of 24 months he/she may be asked to pay the tuition and other payments.
- 9.5. The selection of scholarship holders is transparent upon criteria announced in advance by the Consortium on its webpage. The results from the admission procedure have to be taken into account.
- 9.6. The Coordinator administers the payment of financial contributions to the EMJM scholarship holders according to the rules of the grant. The financial contributions will be paid to a bank account established in the Czech Republic.

10. Costs and Financing

10.1. The Partner Universities undertake to distribute the income from tuition fees among them in the following manner:

Out of every tuition fee, 22% are allocated to the administration of the FINDATA study programme by the Coordinator. The Coordinator thus keeps them in his account per the whole period of studies. The remaining 78% tuition fee income are distributed among all the Partner Universities according to the number of students paying the tuition effectively studying at the particular Partner University. This means in case of EUR 6000 tuition per year that EUR 660 per semester is kept by the Coordinator (irrespective of where the student is studying) and the Partner University teaching the student receives in the particular semester receives EUR 2,340 per this student and semester.

- 10.2. In case of a student not paying the tuition fee because of being granted the EMJM grant the distribution percentage is similar as in the situation of a student paying the tuition. The Partner Universities expect that the grant should be EUR 9,000 per student and 12 months (EUR 4,500 per semester). Then the Coordinator keeps EUR 1,000 per semester to cover his administrative costs and each EMJM student and the Partner University which teaches the student receives EUR 3,500 per that semester.
- 10.3. The insurance of EMJM scholarship holders according to Sec. 12.7 shall be covered from the EUR 1,000 kept by the Coordinator. The Partner Universities should take all reasonable

efforts to seek the most effective way of insuring the students. The Coordinator will send the money together with the contribution for teaching upon a receipt provided by the Partner University.

- 10.4. For the purposes of finance distribution, the Partner Universities agree that supervising a Master Diploma Thesis during the fourth semester is equal to teaching the student the whole semester during the first, second and third semester.
- 10.5. As the number of students in the third semester taught by LUMSA and Vilnius University shall be approximately one half of the students of the intake due to their split in specialisations, the Partner Universities have agreed that LUMSA and Vilnius University shall each supervise approximately 1/3 of the total number of Master Diploma Theses. UPCE and European University Cyprus shall each supervise approximately 1/6 of the total number of Master Diploma Theses. This way the total income from teaching of each Partner University shall be reasonably similar. Model finance distribution of the EMJM grant is set in Annex 4 to the Agreement. During the Summer school after the second semester the Partner Universities will inform the students of the topics available at each university and will take into account their personal preferences. If the student demand does not meet the distribution of topics by universities as agreed above, the students with better study results will be given priority in their choice.
- 10.6. The Partner Universities hereby declare that their expenses related to the FINDATA Study Programme shall covered by the payments described above in this Section.
- 10.7. Due to the fact that the payments from the Coordinator to students and to Partner Universities will be carried out in EUR and Czech accounting is recorded in CZK, the project budget may generate exchange rate gains and losses. The exchange rate gain/loss is calculated at the end of each intake. The exchange rate gain/loss within EUR 2,000 for each intake is borne by the Coordinator. If the exchange rate gain/loo exceeds the amount of EUR 2.000 for a given intake, the excess over this amount is born equally by the four Consortium Partner Universities. The excess gain shall be equally distributed and sent to the three Partner Universities, the loss deduced from payments to the three Partner Universities.

11. Knowledge and Skill Assessment System and Procedure

- 11.1. The FINDATA study programme is based on principles of the EU common higher education area, therefore, students' learning outcomes in the Partner University are acknowledged automatically. The learning outcomes of the students of the FINDATA study programme are accounted according to the requirements of the European Credit Transfer System (ECTS).
- 11.2. The Partner Universities undertake to recognize the successful completion of the study obligations and the assessment of students and obtained degrees within the scope of the FINDATA Study Programme under this Agreement without further examination of equivalency.
- 11.3. Each Partner University releases and grants each student, studying in that particular Partner University, a Transcript of Records indicating his/her academic performances and number of credits obtained at the Partner University. The Partner Universities undertake to recognise learning outcomes as confirmed in this Transcript of Records from other Partner Universities.
- 11.4. The local grading system is used for the assessment of the workload achieved by the students. Partner Universities agree on the evaluation adjustment (see Table 1).
| Consortium
Mark | University of
Pardubice | European University
Cyprus | LUMSA | Vilnius University |
|--------------------|----------------------------|-------------------------------|-----------------------|--------------------|
| А | А | A (90 – 100%) | A (30/30, cum laudae) | 10 (95-100%) |
| В | В | B+(85-89%) | B (30) | 9 (85-94%) |
| С | С | B (80 – 84%) | C (27 - 29) | 8 (75-84%) |
| D | D | C+(75-79%) | D (24 - 26) | 7 (65 – 74%) |
| Е | Е | C (70-74%) | E (18 – 23) | 6 (55–64%) |
| Е | Е | C (70-74%) | E (18 – 23) | 5 (50 - 54%) |
| F (fail) | F (under 60%) | 0 -69% | F (0 – 17) | 1-4 (0-49%) |

Table 1: Grade Conversion Table

- 11.5. The re-taking of examinations, repetition of study subjects, order for re-examination of appeals concerning assessment of outcomes, order of dealing with appeals are regulated by legal documents of the Partner University where the student has been enrolled for studying. If a conflict, violation of academic ethics, procedural actions arise, appropriate structures of a university, where the student has been studying when such situation occurred, perform following the set functions, if needed, collaborating with structures of all Partner Universities.
- 11.6. The final assessment of the student competence providing joint master's degree is evaluation of the Master's Thesis and its public defence. Whereas at the University of Pardubice, defence of Master's Thesis is integrated into the final leaving exam, all students of the programme will be defending their Master Thesis and the academics from University of Pardubice, who are participating in the Examination Committee, will ask theoretical questions which have to be answered by the student to pass the final leaving exam and obtain the joint diploma.
- 11.7. After the second semester, the students choose the research advisor to supervise their Master's Thesis, adjust with him/her the topic of Master's Thesis which is approved before the third semester.
- 11.8. Master's Thesis is assessed by **Examination Committee** of the university the student has chosen for the Master Thesis supervision. The composition of the **Examination Committee** is set according to rules under Sec. 6 of this Agreement. Employer representatives can also be invited to be the members of the Examination Committee.
- 11.9. If the right of appeal against assessment of Master's Thesis is granted by the individual Partner University where the student has been supervised, then it shall be processed according to the order of appeals concerning graduation theses approved at the respective Partner University.

12. Conditions of Students' and Teachers' Mobilities

- 12.1. The Partner Universities shall handle, through their international offices or comparable departments at the faculty/university level, the visa and residence permit requirements for the FINDATA Programme students. Students shall be contacted in due time to submit the necessary documents.
- 12.2. The Partner Universities shall assist students in finding suitable accommodation for them, and if necessary, for their family during the period of their stay. Such assistance may consist of providing contacts. The students pay for their accommodation and catering.
- 12.3. The Partner Universities shall supply students, no later than the day of their arrival, with information on every issue relevant for their stay.
- 12.4. Each FINDATA Programme student shall receive a student card from every Partner University where the student spends a semester and be entitled to the same services and facilities as the other students enrolled at the Partner University. The Partner Universities agree that a welcome meeting shall be organised at the beginning of each term.

- 12.5. The Partner Universities shall send at least one visiting scholar to present the courses taught by their university in the FINDATA Study Programme and the respective specialisation (in case of LUMSA and Vilnius University) during the Introductory week before the start of the first semester. Further, at least one visiting scholar should represent each Partner University at the Summer school after the second semester to present the diploma thesis topics offered by the scholars at their Partner University. Further scholars may visit other Partner Universities for other purposes during the course of the year when they find in necessary or useful for the quality of the programme.
- 12.6. Visiting scholars shall receive office space and access to the same teaching/research facilities as those available to the Partner University's staff.
- 12.7. International offices or comparable departments at the faculty/university level shall be responsible for providing students and scholars with special needs/disabilities with the necessary assistance. They shall also assist students and scholars in arranging medical services, when needed.
- 12.8. The minimum requirements for student insurances for EMJM scholarship holders as given by the EACEA for EMJM programmes will be followed. The costs shall be borne by the Consortium.
- 12.9. Each Partner University releases and grants each FINDATA programme's student, studying in that Partner University, a Transcript of Records indicating his/her academic performances and number of credits obtained at the Partner University.

13. Intellectual Property Protection

- 13.1. Unless otherwise agreed in writing and set by the EMJM Grant Agreement, the results of a scientific research carried out by the student within the FINDATA programme (particularly when writing a masters diploma thesis) shall be shared in accordance with normal academic practice and subject to normal intellectual property management procedures at each Partner University.
- 13.2. Each student shall be informed by the Partner Universities about the rules concerning protection of intellectual property applicable to the Partner University where the student is studying.
- 13.3. Should a student be an employee of a commercial entity and the master thesis be related to the field of business of this commercial entity, an appropriate agreement with the collaborating Partner University and the students' employer shall be arranged prior to the commencement of the work.
- 13.4. When in the opinion of the supervisor or the student novel intellectual property has been created, it must be documented as soon as possible in accordance with the respective Partner University rules and applicable procedures. The other Partner Universities shall be informed.
- 13.5. Plagiarism will not be tolerated by any of the universities and shall one Partner University if the University become suspicious, it will inform the Coordinator and other Partner Universities before taking disciplinary action against the student. Shall it be discovered only after the diploma has been granted, the rules applicable under Czech law leading to withdrawal of the diploma after the procedure envisaged by the law will be applied.

14. Joint Diploma Provision and Documentation Procedure

14.1. The graduates of the FINDATA study programme shall receive a joint diploma signed by all the Partner Universities representatives certifying the programme completion, which form is to be in accordance with the laws of all the states where the Partner Universities are based. The award ceremony will take place at the Coordinator and representatives of all other Partner University may attend it. Details of the diploma layout and its template will be agreed separately.

- 14.2. The European standard assessment scheme will be used and adjusted evaluation presented in the supplement of the diploma according to the confirmed adjustment of study outcome evaluation (see Table 1). All studied subjects are described in the supplement as well as their credits, classroom hours, evaluation and the average score.
- 14.3. Joint diploma is issued when a student passes successfully all the study subjects of the FINDATA study programme and (a) defends his/her Master's Thesis and (b) according to the laws of the Czech Republic passes the state final exam, which covers the defence of Master's Thesis and assessment of selected theoretical courses knowledge, which will be verified/tested by the scholar representing University of Pardubice in the Examination Committee during the Master's Thesis defence.

15. Promotion, Handling of the Partner University Names and Logos in the FINDATA Study Programme

15.1. The Partner Universities agree that the names and logos of the other Partner Universities may be used only for the purposes of the FINDATA programme marketing and other information related to the FINDATA study programme publicity. Shall the EMJM grant be awarded to the Consortium, the promotion of the FINDATA study programme shall be exclusively joint.

16. Breach of the Obligations Stemming from the Agreement and Termination Conditions

- 16.1. All Partner Universities undertake to make every reasonable effort to perform the FINDATA study programme and help the other Partner universities to keep the performance of the Agreement and the FINDATA study programme feasible.
- 16.2. The Partner Universities shall make any reasonable effort to avoid dissolution of the Consortium.
- 16.3. In the event of any controversy or litigation arising from this Agreement the Partner Universities endeavour to resolve the matter amicably and in good faith.
- 16.4. All Partner Universities have right to damages from the other Partner University(-ies) if one university incurs loss related to the FINDATA study programme performance because of the other Partner University's breach of any obligation set in the Agreement. In such case the university which incurs loss, shall formulate claims in written to the Partner University which is responsible for loss due to the improper performance or noncompliance of the FINDATA study programme, and presents arguments and needed proof of the loss. The loss is compensated proportionally to the made damage.
- 16.5. No Partner University shall be obliged to pay any damages to the other Partner University in case that it does not receive the necessary accreditation for start of the FINDATA study programme. The same applies to unsuccessful EMJM grant application. Should one of the Partner universities lose the accreditation during the period when the FINDATA study programme is already running (or it cannot prolong the accreditation), it shall inform the other Partner universities without undue delay and make all reasonable efforts to continue teaching the students that have been already enrolled. The stipulations of the Agreement concerning the future of the FINDATA Study Programme (the selection of applicants etc.) shall not apply to this Partner University. Partner University may withdraw from the Consortium Agreement according to Sec. 16.8. If the Partner University proves that it is unable to obtain accreditation by making reasonable efforts, it shall not pay any damages to other Partner universities.
- 16.6. Liability for damage is excluded if the Party that has breached its duty proves that such a breach was caused by circumstances excluding liability. These circumstances excluding liability (vis maior) are impediments which arose independently of the obligor's will and which prevent the obligor from performing his/her duty, provided that it cannot reasonably be expected that the obligor could avert or overcome such impediments or their consequences,

and, further, that the occurrence of such impediments was unpredictable at the time when the obligor undertook to perform his/her duty. An impediment that only arose during the time when the obligor was in delay with the performance of his/her duty, or which ensued from his/her financial situation, does not exclude the obligor's liability. The consequences excluding liability are limited only to the duration of the impediment to which they relate.

- 16.7. In no event shall a Party's liability to the other Party for direct damages exceed an amount equal to 10,000 EUR.
- 16.8. The Consortium Agreement is to be valid for an indefinite period. All Partner universities have right to terminate the Agreement upon a written notice sent to all the other Partner universities. The Agreement will expire upon the occurrence of the later of:

(1) the following 1st of September;

(2) nine months after the notice was delivered to the last of the other Parties.

16.9. If either Partner University exercises its right to terminate the Agreement:

(1) new students will not be admitted to the FINDATA study programme; and

(2) students already participating in the FINDATA study programme will be allowed to complete their studies under the terms of the Agreement in effect at the time of their acceptance into the FINDATA study programme (including the joint diploma from all four Partner Universities). However, during the EMJM grant period other obligations might follow from the Agreement between the Coordinator (Consortium) and EACEA which shall prevail over the conditions agreed above.

17. Final Provisions

- 17.1. The Agreement inures after the confirmation and signing of all the parties and is termless valid.
- 17.2. No rights or obligations of the Parties arising from this Agreement may be assigned or transferred, in whole or in part, to any third party without the other Parties' prior formal approval.
- 17.3. Amendments and modifications to the text of this Agreement require a separate written agreement to be signed by all Parties.
- 17.4. The Parties shall endeavour to settle their disputes amicably. All disputes arising out of or in connection with this Agreement, which cannot be solved amicably, shall be finally settled by the courts of the Czech Republic.
- 17.5. This Agreement shall be construed in accordance with and governed by the laws of the Czech Republic excluding its conflict of law provisions. Notwithstanding the abovementioned, the implementation of the study programme, the procedure of awarding Joint Master's diploma and the registration of documents must comply with the requirements of the national law under which each Partner University is operating.
- 17.6. In the context of the cooperation under this Agreement, the Parties shall process the personal data of applicants, students, graduates and their employees. As they jointly determine the purposes and means of the processing, the Partner Universities are joint controllers within the meaning of Article 26 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (GDPR). The Partner Universities therefore undertake to enter into a contract between the joint controllers setting out their respective responsibilities for complying with the obligations under the GDPR.
- 17.7. The Annexes to the Agreement form integral part of the Agreement and are binding on all Parties. Wherever the Agreement foresees periodic change of the Annexes, all Parties agree that such change has to be fair, allow each Party to meet statutory requirements and contribute to the feasibility of the Programme.
- 17.8. The Annexes form an integral part of the Agreement and are as follows:

- 1. Student Mobility Scheme;
- 2. List of Board of Directors Members;
- 3. Detailed Admission Criteria for the academic year 2024/2025;
- 4. Model finance distribution of the EMJM grant.
- 17.9. The Agreement is made in four legal copies in the English language: one for each Partner University.

In Pardubice, on 2023

In Nicosia, on 2023

prof. Ing. Libor Čapek, Ph.D. Rector

University of Pardubice

Dr. Christoforos Hadjikyprianou CEO and President of the Council

European University – Cyprus Ltd.

In Rome, on 2023

In Vilnius, on 2023

Giovanni Card. Lajolo

Chair of the Board of Governors LIBERA UNIVERSITA ' MARIA SS ASSUNTA – LUMSA The signature is on the cover page.

Prof. Dr. Rimvydas Petrauskas Rector Vilnius University

Student Mobility Scheme

Semester	Student mobility
The week immediately preceding the start of the semester	Introduction week at University of Pardubice: Introduction to the study programme, acquaintance with specializations, all partner universities participate by sending a lecturer
Semester I	Studies at University of Pardubice:
	All students
Semester II	Studies at European University Cyprus:
	All students
After the 2 nd	Summer School in Cyprus
semester	Introduction of Master's thesis topics by all partner universities.
Semester III	Studies at LUMSA or Vilnius University:
	Students are to choose one of the two universities according to their preference. LUMSA university will offer specialisation in Corporate Finance, Vilnius University specialisation in Financial Markets.
Semester IV	Studies at any of the partner universities:
	Master's thesis per 30 ECTS credits at any university chosen by the student.

List of Board of Directors Members

University	Director
University of Pardubice	Jana Janderová
European University Cyprus	Alexios Kythreotis
LUMSA	Claudio Giannotti
Vilnius University	Roma Adomaitiené

Detailed Admission Criteria for the academic year 2024/2025

1. The first round of the selection procedure is evaluated by a set of criteria as described in the following table (each applicant should be evaluated within the score range and all the received points should be summed up – in total of maximum 100 points):

Overall grade of BSc (or preliminary grade if not finished yet)						
nstitution (THE quartile)	ality of the in	Qua	Overall grade of BSc			
mum points in total 10)	ght 1; maxi	0-10 (weig	points in total 15)	kimum]	0-10 (weight 1.5; max	
gree, relevant extra-	ed MSc deg	eviously obtain	ing BSc study, pre	cts duri	Relevant study subje	
erience	ssional expe	relevant profes	ifications, and/or 1	ic quali	academ	
Extra-academic	levant MSc	Additional re	nber of years since	Nun	Relevant subjects and	
qualifications	dy or work	stu	graduation (BSc or	last g	marks during BSc	
	e since BSc	experience	c) – the longer, the	MS		
	graduation		less points			
0-10 (weight 0.5;	0-10 (weight 1;		0-10 (weight 0.5;		0-10 (weight 2;	
maximum points	num points	maxin	maximum points		maximum points	
in total 5)	in total 10)	on letter	<u>In total 5)</u> Motivati		In total 20)	
	1		Motivati			
Quality of language used	(own intended	Coherence of	of own	Clear description	
		NDATA study	career with FI	erience	qualifications and exp	
		programme				
				1 . 0 5		
0-5 (weight 0.5; vimum points in total 5)	may	5 (weight 0.5; ints in total 5)	0- maximum noi	(ht 0.5; total 5)	0-5 (weig maximum points in f	
initian points in total 5)	Щал	etters (two)	Reference le	.otur 5)		
to personal qualifications	Refer t	to professional	Refer t	ientific	Refer to academic and sc	
potential of the candidate	and/or p	nd/or potential	qualifications an	qualifications and potential of qual		
		f the candidate	ot	the candidate with regard to the		
				ramme	FINDATA programme	
0-10 (weight 1; 0-10 (weight 0.5; 0-10 (weight 0.5;						
ximum points in total 5)	max	ints in total 5)	maximum poi	tal 10)	maximum points in to	

- 2. Not more than 100 candidates will be invited to the second round. In the second round the candidate may achieve up to 100 points according to the quality and structure of his/her answers and his overall impression and during the interview.
- 3. Candidates with less than 50 points in total will not be accepted to the FINDATA Study Programme.

Annex 4

1 student overview	Grant	Coordinator Administrative Costs	Partner University Teaching Fee
1. semester /UPCE	€ 4,500	€ 1,000	€ 3,500
2. semester/ EUC	€ 4,500	€ 1,000	€ 3,500*
3. semester/ LUMSA or VILNIOUS	€ 4,500	€ 1,000	€ 3,500
4. semester	€ 4,500	€ 1,000	€ 3,500
Total (24 months)	€ 18,000	€ 4,000	€ 14,000

Model Finance Distribution of the EMJM Grant

Model case of 24 students

		Coordinator	Partner University
Universities overview	Grant	Administrative Costs	Teaching Fee
UPCE	€ 194,000	€ 96,000	€ 98,000
EUC	€ 98,000	€0	€ 98,000
LUMSA	€ 70,000	€ 0	€ 70,000
VILNIUS	€ 70,000	€ 0	€ 70,000
Total (24 months)	€ 432,000	€ 96,000	€ 336,000

Note: The model case of 24 EMJM scholarship students in one intake foresees ¹/₂ of students studying their 3rd semester at LUMSA, and ¹/₂ at Vilnius University; 1/3 of students writing their diploma thesis during the 4th semester at LUMSA, 1/3 at Vilnius University, 1/6 at UPCE, and 1/6 at European University Cyprus.

*Academic co-ordinator of the programme receives EUR 750 out of the total EUR 3,500.

Course Title	Master Diploma Thesis				
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd Cycle)				
Year / Semester	2 nd Year / 4 ^t	^h Semester			
Teacher's Name	ТВА				
ECTS	30	Lectures / week	Up to 5 sessions	Laboratories / week	None
Course Purpose and Objectives	The course's purpose is to provide guidance on how to write a successful Master's Thesis. It aims to provide skills in research methods in the subdiscipline of Finance. Students will be able to demonstrate the ability to identify and formulate issues critically, independently and creatively as well as to plan and use appropriate methods, undertake advanced tasks within predetermined timeframes, and to contribute to the formation of knowledge in the field. Other skills will be related to participation in research and development work in the field of data analytics and sustainable finance, which is considered the main part of the thesis. The course also aims to equip the student with the tools required to manage a project as large as a Master's Thesis, through providing project management techniques. The Master's Thesis course includes research methods stages of reviewing related work, extending existing or developing new ideas, software implementation and testing, analysis and evaluation, and finally writing a Master's Thesis. Finally, it aims to prepare the student for				
Learning Outcomes	 Upon successful completion of this course students should be able to: Be aware of their responsibilities as research students, including scientific ethics, and data and code management requirements. Communicate research results, including building a scientific argument orally and in writing in the subdiscipline of Artificial Intelligence. Data exploration and statistical analysis of data with the use of statistical tools and probability calculations. Select and justify a research topic and use various resources to carry out a literature search and review in the subdiscipline of Sustainable finance 				

Appendix 3 - Master Diploma Thesis Syllabus

	 Identify real-world problems in the subdiscipline of Artificial Intelligence to which academic concepts and methods can be realistically applied to improve or resolve the problem situation. Select and use effectively the methods and techniques appropriate for particular cases in the subdiscipline of Artificial Intelligence, and plan and manage their work. 			
Prerequisites	The student needs to have completed all core courses of the programme.	Co-requisites	None	
Course Content	The investigation will involve a thorough literature review together with an evaluation of the literature and development of conclusions of the status for management practice and further research activity. The thesis will require students to develop and apply appropriate research methodologies and to evaluate the appropriateness and effectiveness of the research process.			
	A major aim of the thesis is to encourage students to work collaboratively and autonomously with respect to the planning, organization and in some cases implementation of an advanced project at a professional level. The Project/Dissertation is designed to be integrative and strategic. Students will be expected to demonstrate advanced understanding of organizations, markets, capabilities and processes, the strategic external context and a critical application of theory toward the advancement of management practice			
	Students will be expected to draw on the following sources skills, knowledge and understanding:			
	 Use and exploitati Use of relevant co Development of a meet stakeholder Critical thinking an Problem solving a Scanning and orgoniverse sources Use of quantitative Communication in Personal effective reflection on practice Effective performation of the solution of the solutio	ion of information ar ommunication technic ppropriate business needs nd creativity and decision making ganizing data and a e data a range of media veness and interp cice and experience ance with clients and applying ethical and research and develo	nd evaluation of options iques a policies and strategies to abstracting meaning from bersonal skills including d teams organizational values op workable management	

	The thesis report will require students to produce a report of between 15,000 to 20,000 words excluding appendices. The report will contain a literature review, description and evaluation of the research methodology, findings from the research, an option appraisal and full conclusions and recommendations considering the implications for further study but importantly a management report section detailing the main findings from the organizational/sectional analysis.			
Teaching Methodology	Face-to-Face			
Bibliography	There is no text for the course but students will be using a thesis manual, which will be provided by the instructor.			
Assessment	Written Thesis Presentation	70% 30% 100%		
Language	English			

Appendix 4 Academic Staff Handbook



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ACADEMIC STAFF HANDBOOK

Joint MSc. In Financial Data Analytics and Sustainable Finance







FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE

UNLOCK YOUR FINANCIAL DATA ANALYSIS CAREER:

JOINT MASTER'S DEGREE PROGRAMME FINDATA AT 4 EUROPEAN UNIVERSITIES

A multidisciplinary two-year joint master's degree programme linking finance and data analysis with emphasis on environmental, social, and governance considerations.

Two specialisations: Corporate Finance and Financial Markets.



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I. WELCOME MESSAGE

Welcome to the academic staff handbook for the Joint Master program offered by four prestigious European universities. This handbook serves as a comprehensive guide for faculty members involved in delivering this collaborative educational endeavor. As an academic staff member, you play a crucial role in ensuring the success and quality of the program. This handbook outlines important policies, procedures, and guidelines to facilitate effective teaching, research, and collaboration across the partner institutions.

II. OVERVIEW OF THE HANDBOOK

This manual contains relevant information for faculty and staff involved in the Joint MSc. Financial Data Analytics and Sustainable Finance programme. Questions, concerns, or comments about the information presented in this book or about the programme can be directed to the study coordinator, Ms. Barbora Pašková (Phone: +420 466 036 058, Email: findata@upce.cz) or our website https://www.emfindata.eu/.

III. <u>PROGRAMME OBJECTIVES</u>

Financial Data Analytics and Sustainable Finance is a Joint Degree follow-up Master's program organized in cooperation between four partner universities: University of Pardubice, Czech Republic; European University, Cyprus; LUMSA University, Italy and Vilnius University, Lithuania. The objective of the study program is to provide the graduates with systematic knowledge not only of finance but also of advanced technological applications so that they will be prepared to face the challenges associated with constant developments in financial technology.

The aim of the master's study program, Financial Data Analytics and Sustainable Finance, is to educate highly qualified experts in the field of finance and data analytics. These graduates will be equipped with knowledge of key financial and economic disciplines, with an emphasis on environmental, social, and governance (ESG) considerations. Moreover, to meet the demands of the ever-evolving business environment in sustainable finance, graduates must possess technological skills and knowledge. In today's digitized world, data analysis plays a crucial role in processing vast amounts of data to extract useful information, supporting informed decision-making. This study program offers graduates a synergistic blend of economic and financial knowledge and skills, with a strong focus on sustainability and the application of data analysis.









FINDATA FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE 2. PROGRAMME OVERVIEW

I. HISTORY AND BACKGROUND

The FINDATA programme is designed to make the best use of the specific expertise available at each Partner University. The programme is unique and there are not a lot of similar ones around the world. This is the first year that this programme will run and it shall enable each student to profit from the best education and supporting services each Partner offers, while also enable each student to gain experience in different international environments.

The study field is economics/finance completed by informatics. The FINDATA programme comprises 120 ECTS credits, which correspond to a period of study of 4 semesters or 2 years. The study form of the FINDATA programme is full time. The students are obliged to study at least in three of the Partner universities.













II. **PROGRAMME STRUCTURE**

The Joint Master program is typically structured over 4 semesters, with students completing coursework, research projects, and internships across the partner institutions. Faculty members may be involved in teaching courses, supervising research projects, and providing mentorship to students.

Two specialisations are offered to the students to choose within the FINDATA programme – Corporate Finance, and Financial Markets. Each student chooses his specialisation according to his/her preference and also to the capacities of the partner universities. Both of them are equal and lead to the joint diploma provided together by the four Partner universities. Approximately one half of students is expected to study each specialisation.

Student and staff mobilities are integral parts of the FINDATA programme. Each student must spend a semester at least with three out of the four Partner universities.

PROGRAMME REQUIREMENTS	ECTS
One hundred twenty (120) ECTS credits are required to obtain a Master's de Data Analytics and Sustainable Finance. They are distributed as follows:	egree in Financial
Compulsory courses (the exact number of ECTS is depending on the students' choice between LUMSA or Vilnius).	70 - 71
Elective courses (the exact number of ECTS is depending on the students' choice between LUMSA or Vilnius).	19 - 20
Postgraduate assignment	30
Total Requirements	120













III. **DURATION – SEMESTER BREAKDOWN**

The FINDATA programme is designed to make the best use of the specific expertise available at each Partner University. It shall enable each student to profit from the best education and supporting services each Partner offers, and to enable each student to gain experience in different international environments.

Two specialisations are offered to the students to choose within the FINDATA programme, 1) Corporate Finance and 2) Financial Markets. Each student chooses his specialisation according to his/her preference and also to the capacities of the partner universities. Both of them are equal and lead to the joint diploma provided together by the four Partner universities. Approximately one half of students is expected to study each specialisation.





European **University** Cyprus







IV. MODULES

LIST OF COURSES

Structure of the Programme of Study:

1 st Semester University of Pardubice	ECTS
Economics and Financial Aspects of Innovation and Sustainability	5
Principles of Artificial Intelligence and Machine Learning	5
Applied Financial Econometrics	5
EU Law and European Values	5
Research Methods	5
Electives (one out of two):	
Principles of programming for R	5
International Finance and Macroeconomics	5
2 nd semester European University Cyprus	ECTS
Computational Finance	10
Big Data Analytics in Finance	10











2 nd semester European University Cyprus	
Electives (one out of two):	
Machine Learning in Finance	10
Programming for Python	10
Summer school in Cyprus – June, after the exam period The aim is to introduce the students with diploma thesis topics and choices available at each university. One representative from each university should participate.	
3 rd Semester Choice between LUMSA or Vilnius	ECTS
a) LUMSA (specialisation Corporate Finance)	
Innovation in Banking and FINTECH	6
Sustainable Finance and Investments	6
Advanced Corporate Finance	8
Ethics and Humanism in Digital Era	6
Electives (one out of two):	
Financial Risk Management	4
Corporate Strategy and Sustainability	4









	ECTS
b) Vilnius University (specialisation Financial Markets)	
Integrity and Ethics in Finance	5
Behavioural Finance for Sustainable Development	5
Technical Analysis of Financial Markets	5
Investing for Environmental and Social Impact	5
Financial Technologies and Alternative Investments	5
Electives (one out of two):	
Equity Securities	5
Investment Portfolio Analysis	5
4 th Semester	ECTS
In any University Master diploma theses	30

*Students will be present in the campus of the selected university during the whole semester.

**For more details and course descriptions, please refer to the annexes.











V. PARTNER INSTITUTIONS

- 1. University of Pardubice, Czech Republic
- 2. European University Cyprus, Cyprus
- 3. LUMSA University, Italy
- 4. Vilnius University, Lithuania











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I. <u>MISSION STATEMENT</u>

The mission of the Joint Master program is to foster academic excellence, intercultural understanding, and global citizenship through collaborative teaching, research, and exchange. Our goal is to equip future leaders with the interdisciplinary skills and knowledge needed to address complex environmental challenges through data-driven analysis and effective governance strategies. By integrating expertise in data analysis with principles of environmental governance, our joint masters program fosters innovative problem-solving and sustainable decision-making to create positive impact for both ecosystems and societies worldwide.

II. CORE VALUES AND OBJECTIVES

Our values are aligned with the core principles of sustainable finance and responsible investing, such as:

- 1. <u>Sustainability</u>: Prioritizing sustainable financial practices that consider environmental, social, and governance (ESG) factors in investment decision-making to promote long-term economic stability and societal well-being.
- 2. <u>Ethical Integrity</u>: Upholding ethical integrity in financial analysis and decision-making processes, ensuring transparency, accountability, and fairness to all stakeholders.
- 3. <u>Innovation and Adaptability</u>: Encouraging innovation and adaptability in financial strategies to address emerging ESG issues, fostering resilience in the face of evolving market dynamics and regulatory landscapes.
- 4. <u>Interdisciplinary Collaboration</u>: Promoting collaboration across disciplines, integrating data analysis techniques with environmental, social, and governance frameworks to generate comprehensive solutions to contemporary financial challenges.
- 5. <u>Corporate Responsibility</u>: Instilling a commitment to corporate responsibility, whereby financial decisions reflect a consideration of not only financial returns but also the broader impact on society, the environment, and corporate stakeholders.
- 6. <u>Risk Management and Mitigation</u>: Prioritizing risk management and mitigation strategies that account for ESG factors alongside traditional financial metrics, safeguarding against potential risks and promoting sustainable growth.











- 7. Diversity and Inclusion: Valuing diversity and inclusion in financial analyses and decision-making processes, recognizing the importance of diverse perspectives in generating holistic solutions that benefit all stakeholders.
- 8. Continuous Learning and Professional Development: Fostering a culture of continuous learning and professional development, equipping graduates with the skills and knowledge needed to navigate the evolving landscape of ESG-focused financial analysis.
- 9. Global Citizenship: Promoting global citizenship by preparing students to address financial challenges within a broader context of global interconnectedness, understanding the interconnected nature of financial markets and environmental and social systems worldwide.
- 10. Impact Investing: Emphasizing the potential for financial investments to generate positive social and environmental impact alongside financial returns, aligning investment strategies with sustainable development goals and societal values.











14 Vilnius

University



III. COMMITMENT TO DIVERSITY AND INCLUSION

Prioritizing diversity and inclusion is foundational for achieving our program's goals and fostering a vibrant learning environment. Ethically, it reflects our commitment to equity and fairness, ensuring that all students, regardless of their backgrounds, feel valued and have equitable access to opportunities for academic and professional growth. Socially, our dedication to diversity promotes collaboration and understanding among students from diverse backgrounds, enriching discussions, and broadening perspectives on complex ESG issues.

Furthermore, diversity fuels innovation and creativity within our program, as students with varied experiences and viewpoints contribute unique insights to data analysis and governance practices. This diversity of thought not only enhances the quality of research and projects undertaken but also prepares students to tackle real-world challenges with agility and ingenuity. Moreover, by fostering an inclusive learning environment, we attract a diverse cohort of talented individuals, enhancing the richness of academic discourse and collaboration. Ultimately, our commitment to diversity and inclusion within the master's program not only aligns with our ethical principles but also serves as a strategic advantage, ensuring that graduates are well-prepared to navigate the complexities of ESG issues and drive positive change in their respective fields.











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FINDATA FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE

4. ROLES AND RESPONSIBILITIES

I. FACULTY ROLES AND EXPECTATIONS

As an academic staff member of the Joint Master program, your responsibilities may include:

- Teaching courses within your area of expertise.
- Supervising student research projects and dissertations.
- Participating in program development and curriculum review.
- Providing academic advising and mentorship to students.
- Engaging in collaborative research and publication activities with colleagues across partner institutions.
- Contributing to the assessment and evaluation of student learning outcomes.
- Representing the program at conferences, workshops, and other professional events.

II. ADMINISTRATIVE ROLES AND SUPPORT

Administrative roles are crucial for ensuring the smooth operation and success of the program. These roles encompass a range of responsibilities, including program coordination, curriculum development, student support, admissions management, internship facilitation, career services, financial aid administration, program evaluation, marketing, and general administrative support.

Administrative staff work collaboratively with academic faculty to create a conducive learning environment, facilitate student success, and promote the program to prospective students and employers. Their efforts contribute to the overall effectiveness and reputation of the program, ensuring that it meets academic standards, fulfills student needs, and remains responsive to industry trends and demands.











16 Vilnius

University



FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE

The Joint Management Steering Committee's role is to discuss the strategic issues of the FINDATA programme and determine its main direction and development. Thus, its functions are mainly to: 1) propose amendments to the Agreement between the Partner Universities on the Programme performance when necessary; 2) coordinate and provide suggestions on the student admission to the FINDATA Programme; 3) submit proposals to responsible bodies of the Partner Universities concerning tuition fees, considering the legislation of the countries and internal university regulations; 4) provide suggestions, concerning the distribution of the finances of the Programme; 5) take final decisions in matters submitted to it be the Board of Directors.

The Joint Management Steering Committee's shall meet at least once during the academic year. The meetings are held in any of the Partner Universities or in a distance mode facilitated by video conferencing technologies. It is allowed to express the opinion and vote by electronic means. In the case of equality of votes the final decision is made by the chair of Joint Management Steering Committee. The secretary of the Joint Management Steering Committee shall be selected at its first meeting. He/she is responsible for the reports and records of the meetings.









FINDATA FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE 5. PROGRAMME GOVERNANCE

I. PROGRAMME LEADERSHIP STRUCTURE

The FINDATA Programme is administrated by the Joint Management Steering Committee and Board of Directors. They are supported by the Admission Committee, Scholarship Selection Committee and Examination Committees.

The Coordinator nominates the Consortium Director. Each other Partner University appoints a local Director. Each Partner University may change its Director as it deems necessary or appropriate. Each Partner University is obliged to inform about the changes of the Director all the other Partner Universities. Together the four Directors form the Board of Directors.

The Joint Management Steering Committee consists of the Directors, the local FINDATA programme coordinators (guarantors) and further members. At least one student of the FINDATA Programme shall be selected by all the students to represent them at the meetings and be a full member of the Joint Management Steering Committee. As soon as applicable at least one alumni shall be appointed by the Board of Directors to become a full member of the Joint Management Steering Committee by the Partner Universities can take part in the meetings of Joint Management Steering Committee as guests. The decisions are taken by majority, in the event of a tie, the vote of the Consortium Director shall be decisive.

The Board of Directors consists of four members - the Consortium Director and three local Directors. It manages the administration of the Consortium including financial management, the daily operation of the FINDATA programme, and solves issues that may arise in the course of studies as it is the executive body of the Consortium. The members of the Board of Directors gather at regular meetings (at least once per semester). The meetings shall be held on/line unless it is possible to meet in person. Shall any of the Directors feel the need to discuss an issue related to the FINDATA Programme a meeting shall convened within a reasonable time period. They decide on the admission of students and on scholarships. The decisions are taken by majority, in the event of a tie, the vote of the Consortium Director shall be decisive.

The Admission Committee is appointed by the Board of Directors from academic staff of all Partner Universities. It guarantees the admission process and proposes a list of students to be admitted in each intake to the Board of Directors.

The Scholarship Selection Committee is appointed by the Board of Directors from academic staff of all Partner Universities. It proposes a list of students to be granted the EMJM scholarship according to its rules for each intake to the Board of Directors.

The Examination Committees are set up for each final leaving exams and Masters' thesis defence. They are composed according to the internal rules of the partner University where the final leaving exams or master thesis defence take place. Moreover, they need to include one academic from each Partner University. These members may be present on-line, however they must be able to ask questions and have a vote on the final result. The members shall be











appointed by the dean of each Partner University upon the request of the Partner University organising the final leaving exams or the Master thesis defence.

II. DECISION MAKING PROCESS

The FINDATA study programme is based on principles of the EU common higher education area, therefore, students' learning outcomes in the Partner University are acknowledged automatically. The learning outcomes of the students of the FINDATA study programme are accounted according to the requirements of the European Credit Transfer System (ECTS).

The Partner Universities undertake to recognize the successful completion of the study obligations and the assessment of students and obtained degrees within the scope of the FINDATA Study Programme without further examination of equivalency.

Each Partner University releases and grants each student, studying in that particular Partner University, a Transcript of Records indicating his/her academic performances and number of credits obtained at the Partner University. The Partner Universities undertake to recognise learning outcomes as confirmed in this Transcript of Records from other Partner Universities.

III. <u>COMMITTEES AND WORKING GROUPS</u>

The FINDATA Programme is administrated by the Joint Management Steering Committee and Board of Directors. They are supported by the Admission Committee, Scholarship Selection Committee and Examination Committees.

The Board of Directors consists of four members:

Dr Alexios Kythreotis - European University Cyprus •Assistant Professor, Financial Accounting •The School of Business Administration •Department of Accounting, Economics and Finance
 Dr. Jana Janderová - University of Pardubice Assistant Professor, Public Law Faculty of Economics and Administration Institute of Administrative and Social Sciences
 Prof. Claudio Giannotti - LUMSA Professor, Economics of Financial Intermediaries Department of Jurisprudence, Economics, Politics and Modern Languages
 Dr. Roma Adomaitiené - Vilnius University Associate Professor, Quality Management Faculty of Economics and Business Administration









Vilnius University



AND SUSTAINABLE FINANCE

Dr. Alexios Kythreotis

Dr. Alexis Kythreotis is an Assistant Professor in Accounting and Finance at European University Cyprus. He holds a PhD in Financial Accounting from Athens University of Economics and Business and an MBA from Cardiff University. Additionally, he holds the European Certificate in E-learning Courses Design and Teaching from UOC, Universitat Oberta de Catalunya. His research primarily focuses on Financial Accounting, Financial Fraud, Market-Based Accounting Research, and the Quality of Financial Statements. Alexios was the Chairperson of Accounting, Economics and Finance Department at European University Cyprus from 2017 to 2022 and the Coordinator of the BSc in Accounting form 2015 until 2023.

JUDr. Jana Janderová, Ph.D.

Jana is assistant professor (since 2012) and vice-dean for external affairs and development (since 2020) at the Faculty of Economics and Administration, University of Pardubice (UPCE). She holds a PhD in Private Law from Charles University, Prague, the Czech Republic (2008), and a MSc in Law and Legal Science (2002). Prior to UPCE, Jana had worked as company secretary in one of the International Power, plc. holding companies responsible for legal affairs in Central and East Europe. Jana's main research fields are mainly Administrative and EU Law, where she concentrates mainly on the common values of good governance and human rights protection. Her research outcomes have been presented in various scientific conferences and international journals. She teaches courses at bachelor and master level in the mentioned areas of law both in Czech and English.

Prof. Claudio Giannotti

Director of the Department of Law, Economics, Politics and Modern Languages of LUMSA in Rome. Full Professor of Economics of Financial Intermediaries at the Department of Law, Economics, Politics and Modern Languages of the LUMSA University. Founding member of the Center for Relationship Banking and Economics (CERBE), research unit of LUMSA in Rome. Member of the Academic Board of the PhD in Civil Economy Sciences. Governence, Institutions and History of the LUMSA University. Member of the Board of the European Real Estate Society (ERES), which includes academics, operators and PhD students with the main objective of promoting and developing research in real estate economics and finance in Europe (from 2012 to today). Senior Collaborator of the Financial Intermediation and Insurance Area of the SDA Bocconi of Milan. PhD in Banking and Finance, X Cycle of the Doctorate, with administrative headquarter at the University of Rome Tor Vergata (2000). Vice Rector with responsibility for research activity at the LUM University (from 2012 to 2014). Member of the Academic Board of the Research Doctorate in Banking and Finance at the University of Rome Tor Vergata (from 2006 to 2013). Member of the Academic Board of the International Research Doctorate in "The Economics and Management of Natural Resources" promoted by the LUM University, in collaboration with the Megatrend University of Belgrade (Serbia), the China Three Gorges University (China), the Louisiana Tech University (USA) and the Saint Petersburg State Forest Technical University (Russia) (until July 2015). Director of the Management School of the LUM Jean Monnet University of Casamassima (Bari), from 2011 to January 2012. Educational auditor ASFOR (Italian Association for Management Training) for the verification of the requirements for the accreditation of the Masters (from 2005 to 2007). Member of the ICT Commission of ASFOR (Italian Association for Management Training) on the accreditation criteria, the glossary and the quality requirements of the e-Learning Masters









Vilnius University



(from 2000 to 2006). The research activity has mainly developed along the following lines: real estate credit; real estate investments and funds; the relationship between banks and companies; credit securitization; commercial credit; the Fintech; financial education.

Dr. Roma Adomaitiene

R. Adomaitiene holds PhD in Management from Vilnius University, Lithuania. She has more than 25 years of experience in teaching, and now she is an associate professor at the Faculty of Economics and Business Administration (FEBA), Vilnius University. At the same faculty, she has been employed as vice-dean for studies since 2017. As an expert, R. Adomaitiene participated in a few EU-funded projects; she consulted public sector organizations and was an assessor of the national quality prize. In 2021-2022, R. Adomaitiene was a member of the Council of the Lithuanian Association for Quality Management and Innovation. R. Adomaitiene initiated and coordinated FEBA's accreditation according to CEEMAN international quality requirements, and now is preparing for AACSB accreditation.

Our working groups – academic staff are:

UNIVERSITY OF PARDUBICE



Jana Janderová, Ph.D.

Prof. Hana Kopáčková, Ph.D.

Prof. Viktor Prokop, Ph.D.

prof. Ing. Jan Stejskal, Ph.D.









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LUMSA UNIVERSITY



Stefano Bonini, M.A., PhD



prof. Lucia Gibilaro, Ph.D.



prof. Giovanni Ferri, Ph.D.



prof. Laura Palazzani, Ph.D.



Carolina Gianardi



Oriana Perrone, MSc., Ph.D.



prof. Claudio Giannotti, Ph.D.





B.Sc. Alexios Kythreotis, MBA, Ph.D



B.A. Simona Mihai-Yiannaki, MBA, Ph.D.



prof. Klea Panayidou, Ph.D.



BSc. MSc. Andreas Papayiannis, Ph.D.

VILNIUS UNIVERSITY



Lect. Rosvaldas Krušna



Prof. Dr., Alfreda Šapkauskienė



Assoc. Prof., Dr. Tom Hashimoto



Prof., Dr. Rasa Kanapickienė



Assoc. Prof., Dr. Greta Keliuotytė-Staniulėnienė



Assoc. Prof., Dr. Antanas Laurinavičius



Prof. Dr., Jelena Stankevičienė









Vilnius University







6. POLICIES, PROCEDURES AND STUDENT SUPPORT **SERVICES**

I. **RESOURCES AND SUPPORT**

Faculty members have access to a range of resources and support services to facilitate their work within the Joint Master program. These resources include:

- 1. Library and research facilities at partner institutions.
- 2. Teaching and learning support services.
- 3. Administrative support from program coordinators and administrators.
- 4. Opportunities for collaboration and networking with colleagues across partner institutions.

II. ACADEMIC ADVISING

Academic advising is crucial in guiding students throughout their educational journey. As an academic staff you are also an advisor that offers personalized support by assisting students in navigating academic requirements, selecting courses, and developing educational plans that align with their goals and interests. Beyond course selection, advisors provide mentorship, helping students explore academic and career pathways, address challenges, and capitalize on opportunities for growth. By fostering meaningful relationships and empowering students to make informed decisions, academic advisors contribute to student success, retention, and overall satisfaction with their academic experience.











FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE III. COUNSELING AND MENTAL HEALTH SERVICES

Counseling and mental health services will provide invaluable support to students, promoting emotional well-being and academic success. These services will offer confidential counseling sessions to address a range of mental health concerns, including stress, anxiety, depression, and possible homesickness issues. Counselors will work collaboratively with students to develop coping strategies, improve self-awareness, and enhance resilience. Additionally, mental health services may offer workshops and psychoeducational resources to promote mental health awareness and self-care practices. By prioritizing students' mental health needs and providing accessible and supportive services, counseling centers contribute to a positive and inclusive campus environment conducive to holistic student development.

These services include:

- <u>Mental Health Counseling</u>: Access to mental health counseling services to address homesickness, adjustment issues, stress, anxiety, or other emotional concerns that may arise during the study abroad experience.
- <u>Follow-up Support</u>: Follow-up support and check-ins throughout the study abroad experience to ensure that students are adjusting well and have access to the resources and support they need to succeed.

IV. DISABILITY SUPPORT SERVICES

Disability support services play a pivotal role in ensuring that students with disabilities have the necessary accommodations to navigate the unique challenges of studying in different countries, including potential homesickness. These services provide personalized support tailored to the needs of each student, which may include access to mental health counseling to address feelings of homesickness, adjustment issues, or other emotional concerns. Additionally, disability support staff collaborate with students to develop strategies for managing stress and maintaining well-being while studying abroad. By offering comprehensive support and fostering a welcoming and inclusive environment, disability support services help students with disabilities thrive academically and personally during their international academic experiences.

These services include:

- <u>Pre-departure Planning</u>: Assistance in coordinating accommodations and support services prior to departure, including arranging accessible transportation, accommodations, and specialized equipment as needed.
- <u>Accessibility Accommodations</u>: Provision of accommodations such as accessible housing, transportation, and classroom facilities to ensure that students can fully participate in academic activities and campus life.









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• <u>Peer Support Networks</u>: Connection with peer support networks or student organizations for students with disabilities, providing opportunities for socialization, peer mentoring, and sharing experiences with fellow students.

V. <u>CAREER DEVELOPMENT AND PLACEMENT SERVICES</u>

As we continue to enhance the study abroad experience for our students in the program, it's crucial to emphasize the significance of placement and career development opportunities. By incorporating these elements into our curriculum and support services, we can provide students with invaluable pathways to professional growth and success.

Placement and career development opportunities are important to complement students' academic studies and prepare them for the workforce. Through internships, part-time work, and other career-related experiences, students gain practical skills and hands-on learning opportunities that enrich their academic journey. These experiences not only enhance their resumes but also cultivate a global mindset that is essential in today's interconnected world.

Moreover, engaging in placement and career development activities during study abroad fosters adaptability, resilience, and cross-cultural communication skills—qualities highly valued by employers. By exposing students to diverse cultures and work environments, we prepare them to thrive in the global workforce and make meaningful contributions to their chosen fields.

As academic staff, your support and guidance are instrumental in helping students navigate these placement and career development opportunities. The key elements in enhancing the study abroad experience for students include facilitating internships and work experiences, offering career counseling and guidance, providing networking opportunities, conducting skill development workshops, and integrating career development into the academic curriculum. By incorporating these elements, students gain practical skills, explore career options, build professional networks, and enhance their job search readiness, ultimately preparing them for successful careers in their chosen fields upon graduation. By incorporating these elements into our program and providing students with the necessary resources and support, we empower them to leverage their study abroad experience for future career success.

VI. <u>ACADEMIC INTEGRITY POLICY</u>

In our program, academic integrity is paramount, reflecting our commitment to excellence and ethical scholarship. It encompasses honesty, trustworthiness, and adherence to rigorous standards in all academic endeavors. Students are expected to uphold integrity in research, writing, and collaboration, ensuring that all work is original, properly cited, and conducted with transparency and intellectual honesty. Our academic integrity policy outlines clear expectations and consequences for violations, fostering a culture of accountability and ethical conduct within our academic community. By maintaining academic integrity, students demonstrate











their dedication to scholarly excellence and contribute to the credibility and reputation of our program.

VII. **GRIEVANCE AND CONFLICT RESOLUTION PROCEDURES**

If a conflict, violation of academic ethics, procedural actions arise, appropriate structures of a university, where the student has been studying when such situation occurred, perform following the set functions, if needed, collaborating with structures of all Partner Universities.

HEALTH AND SAFETY POLICIES VIII.

Guidelines and procedures that outline health and safety frameworks to ensure the well-being of our individuals within our environment are fundamental. These policies encompass measures to prevent accidents, injuries, and occupational hazards, as well as protocols for emergency response and risk management. By establishing clear expectations and standards for health and safety practices, we promote a culture of awareness and accountability among employees and students. Additionally, health and safety policies are regularly reviewed and updated to reflect changes in regulations, technological advancements, and organizational needs, ensuring ongoing effectiveness in protecting individuals and promoting a safe and healthy environment. Our policies cover various areas, including fire safety, first aid, workplace violence prevention, equipment usage, personal protective equipment, and environmental health.

IX. DATA PROTECTION AND PRIVACY POLICIES

The Joint Master program adheres to the policies and procedures established by each partner institution, as well as the overarching guidelines outlined in this handbook. Key policies and procedures include:

- Academic Integrity: Faculty members are expected to uphold academic integrity and promote ethical conduct among students. Any instances of academic dishonesty should be reported and addressed according to institutional policies.
- Diversity and Inclusion: The Joint Master program is committed to fostering a diverse and inclusive learning environment. Faculty members are encouraged to promote diversity and equity in their teaching and research activities.
- Communication: Clear and effective communication is essential for the success of the program. Faculty members should maintain regular communication with students, colleagues, and program administrators.
- Professional Development: Faculty members are encouraged to engage in professional • development activities to enhance their teaching, research, and leadership skills. Opportunities for professional development may include workshops, conferences, and seminars.









7. TEACHING AND LEARNING

I. <u>PEDAGOGICAL APPROACHES</u>

The academic staff should adopt pedagogical approaches that engage students actively in their learning, promote critical thinking and problem-solving skills, and foster a collaborative and inclusive learning environment. Some pedagogical approaches that may be effective in this program include:

- 1. <u>Active Learning</u>: Encouraging students to participate actively in discussions, group activities, and hands-on projects to deepen their understanding of key concepts and develop practical skills.
- 2. <u>Problem-Based Learning (PBL</u>): Presenting students with real-world problems or case studies related to data analysis, environmental governance, and finance, and guiding them through the process of analyzing and solving these problems collaboratively.
- 3. <u>Experiential Learning</u>: Providing opportunities for students to engage in internships, research projects, or fieldwork related to their areas of study, allowing them to apply theoretical knowledge to real-world contexts and gain practical experience.
- 4. <u>Technology Integration</u>: Leveraging technology tools and platforms to enhance teaching and learning, such as data analysis software, simulation tools, and online resources for collaborative learning and research.
- 5. <u>Interdisciplinary Approaches</u>: Integrating perspectives from multiple disciplines, such as environmental science, economics, and finance, to provide a holistic understanding of complex issues and foster interdisciplinary thinking among students.
- 6. <u>Inquiry-Based Learning</u>: Encouraging students to ask questions, explore topics of interest, and conduct independent research to deepen their understanding and develop critical thinking skills.
- 7. <u>Peer Learning and Collaboration</u>: Facilitating peer-to-peer learning through group projects, peer review activities, and collaborative problem-solving tasks, allowing students to learn from each other's perspectives and experiences.
- 8. <u>Feedback and Reflection</u>: Providing timely and constructive feedback on student work and encouraging reflection on their learning process, strengths, and areas for improvement to promote continuous growth and development.

By incorporating these pedagogical approaches into the teaching practices, academic staff can create engaging and enriching learning experiences that prepare students to excel in their academic studies and future careers in data analysis, environmental governance, and finance.









FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE II. CURRICULUM DESIGN AND DEVELOPMENT

The Joint Management Steering Committee is responsible to ensure the overall quality of the FINDATA Programme and that the FINDATA Programme curriculum responds to the needs of students, and the labour market. The Coordinator is obliged to contribute to the curriculum content and delivery, including monitoring of balanced use of different teaching and learning methods under the responsibility of the Joint Management Steering Committee. The other three Partner universities are each individually obliged to contribute to curriculum content and delivery, also including monitoring of balanced use of different teaching and learning methods.

III. ASSESSMENT AND EVALUATION METHODS

To be eligible for the award of the degree, a student must undertake the programme of study as approved by the Academic Board and obtain at least 120 ECTS at Master's level (with at least 60 ECTS in year 1 and 60 ECTS in year 2). Successful students receive a joint award from the institutions that they have attended.

The University reserves the right not to issue the degree if the student has not fulfilled all obligations to the University, financial and/or otherwise.

The degree certificate shall be accompanied by academic transcripts of records, issued by the institutions which the student attended in their mobility track, as well as a joint Diploma Supplement. The transcript is a list which specifies all the components of the Masters programme and the grades obtained in assessments.

The FINDATA study programme is based on principles of the EU common higher education area, therefore, students' learning outcomes in the Partner University are acknowledged automatically. The learning outcomes of the students of the FINDATA study programme are accounted according to the requirements of the European Credit Transfer System (ECTS).

The Partner Universities undertake to recognize the successful completion of the study obligations and the assessment of students and obtained degrees within the scope of the FINDATA Study Programme without further examination of equivalency.

Each Partner University releases and grants each student, studying in that Partner University, a Transcript of Records indicating his/her academic performances and number of credits obtained at the Partner University. The Partner Universities undertake to recognize learning outcomes as confirmed in this Transcript of Records from other Partner Universities.

The local grading system is used for the assessment of the workload achieved by the students. Partner Universities agree on the evaluation adjustment.













Consortium Mark	University of Pardubice	European University Cyprus	LUMSA	Vilnius University
A	A	A (90 – 100%)	A (30/30, cum laudae)	10 (95 – 100%)
В	В	B+ (85 - 89%)	B (30)	9 (85 - 94%)
С	С	B (80 – 84%)	C (27-29)	8 (75 - 84%)
D	D	C+ (75 – 79%)	D (24-26)	7 (65 – 74%)
E	E	C (70 – 74%)	<i>E</i> (18 – 23)	6 (55 -64%)
E	Ε	C (70 – 74%)	<i>E</i> (18–23)	5 (50 – 54%)
F (fail)	F (under 60%)	0 -69%	F (0-17)	1-4 (0-49%)

The grading system for the programme shall be as follows:

The re-taking of examinations, repetition of study subjects, order for re-examination of appeals concerning assessment of outcomes, order of dealing with appeals are regulated by legal documents of the Partner University where the student has been enrolled for studying.

The final assessment of the student competence providing joint master's degree is evaluation of the Master's Thesis and its public defence. Whereas at the University of Pardubice, defence of Master's Thesis is integrated into the final leaving exam, all students of the programme will be defending their Master Thesis and the academics from University of Pardubice, who are participating in the Examination Committee, will ask theoretical questions which have to be answered by the student to pass the final leaving exam and obtain the joint diploma.

If the right of appeal against assessment of Master's Thesis is granted by the individual Partner University where the student has been supervised, then it shall be processed according to the order of appeals concerning graduation theses approved at the respective Partner University.









FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE IV. TECHNOLOGY INTEGRATION IN TEACHING

Embracing technology in our teaching practices can significantly enhance the learning experience for students in our program. By incorporating technology tools and platforms, we have the opportunity to create dynamic and interactive learning environments that engage students actively in their learning process. Technology offers a wealth of resources, from multimedia presentations and online simulations to data analysis software and collaborative platforms, that can help illustrate complex concepts, facilitate hands-on learning experiences, and foster collaboration among students. Moreover, leveraging technology allows us to accommodate diverse learning styles and preferences, making learning more accessible and inclusive for all students. Our academic staff are encouraged to explore the innovative possibilities that technology offers and strive to integrate it effectively into our teaching practices to enrich the educational experience and prepare students for success in their academic and professional endeavors.











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FINDATA FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE 8. RESEARCH, INTERNATIONAL COLLABORATION (PROJECTS) AND EXCHANGE

I. <u>RESEARCH EXPECTATIONS FOR FACULTY</u>

After the second semester, the students choose the research advisor to supervise their Master's Thesis, adjust with him/her the topic of Master's Thesis which is approved before the third semester. Master's Thesis is assessed by Examination Committee of the university the student has chosen for the Master Thesis supervision. Employer representatives can also be invited to be the members of the Examination Committee.

During the summer school after the second semester the Partner Universities will inform the students of the topics available at each university and will take into account their personal preferences. If the student demand does not meet the distribution of topics by universities as agreed above, the students with better study results will be given priority in their choice.

Unless otherwise agreed in writing and set by the EMJM Grant Agreement, the results of a scientific research carried out by the student within the FINDATA programme (particularly when writing a masters diploma thesis) shall be shared in accordance with normal academic practice and subject to normal intellectual property management procedures at each Partner University.

Each student shall be informed by the Partner Universities about the rules concerning protection of intellectual property applicable to the Partner University where the student is studying.

As the number of students in the third semester taught by LUMSA and Vilnius University shall be approximately one half of the students of the intake due to their split in specialisations, the Partner Universities have agreed that LUMSA and Vilnius University shall each supervise approximately 1/3 of the total number of Master Diploma Theses. UPCE and European University Cyprus shall each supervise approximately 1/6 of the total number of Master Diploma Theses.

For the purposes of finance distribution, the Partner Universities agree that supervising a Master Diploma Thesis during the fourth semester is equal to teaching the student the whole semester during the first, second and third semester.









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FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE II. COLLABORATIVE RESEARCH OPPORTUNITIES

Should a student be an employee of a commercial entity and the master thesis be related to the field of business of this commercial entity, an appropriate agreement with the collaborating Partner University and the students' employer shall be arranged prior to the commencement of the work.

When in the opinion of the supervisor or the student novel intellectual property has been created, it must be documented as soon as possible in accordance with the respective Partner University rules and applicable procedures. The other Partner Universities shall be informed.

III. GRANT AND FUNDING OPPORTUNITIES

The Parties, particularly in an effort to provide a quality label that will help make the programme attractive to applicants from different countries around the world, intend to seek support from the EU ERASMUS Mundus Joint Masters grant (hereinafter the "EMJM" only). They wish to apply for the grant in February 2024. The Coordinator will prepare the application and all the other Partner universities will provide their full support.

Shall the EMJM grant application be successful, the Parties shall perform and complete their share of the FINDATA programme activities in accordance with the requirements set out in the agreement between the Coordinator and the EACEA. Each Partner shall carry out the work in such a way that no act or omission in relation thereto shall constitute, cause, or contribute to any breach or non-compliance by the Coordinator or by other parties of any of their respective obligations under the contract between the Coordinator and the EACEA.

The Parties intent to run the FINDATA programme even if the above described EMJM application is not successful. The Parties will seek other opportunities for scholarships. Moreover, they will apply for the EMJM grant also in the following years.

The students may apply for the FINDATA EMJM grant monthly allowance directly to the Consortium. The Consortium (Board of Directors upon the recommendation of the Scholarship Selection Committee) shall select the eligible students upon the conditions set by the EMJM grant and the agreement with the EACEA. Shall a student receive the EMJM scholarship, he/she shall pay no tuition as set nor any other payments to the Partner Universities or Consortium (this does not apply to living costs such as payments for dormitories, meals and the university canteen etc.). The EMJM scholarship holder may not receive more than 24 monthly scholarship payments and after the period of 24 months he/she may be asked to pay the tuition and other payments.









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The selection of scholarship holders is transparent upon criteria announced in advance by the Consortium on its webpage. The results from the admission procedure have to be taken into account.

The Coordinator administers the payment of financial contributions to the EMJM scholarship holders according to the rules of the grant. The financial contributions will be paid to a bank account established in the Czech Republic.

In case of a student not paying the tuition fee because of being granted the EMJM grant the distribution percentage is similar as in the situation of a student paying the tuition. The Partner Universities expect that the grant should be EUR 9,000 per student and 12 months (EUR 4,500 per semester). Then the Coordinator keeps EUR 1,000 per semester to cover his administrative costs and each EMJM student and the Partner University which teaches the student receives EUR 3,500 per that semester.

The insurance of EMJM scholarship holders shall be covered from the EUR 1,000 kept by the Coordinator. The Partner Universities should take all reasonable efforts to seek the most effective way of insuring the students. The Coordinator will send the money together with the contribution for teaching upon a receipt provided by the Partner University.











FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE IV. OPPORTUNITIES FOR INTERNATIONAL COLLABORATION

By fostering partnerships with universities, research institutions and industry organizations abroad, academic staff will create avenues for students to engage in cross-cultural exchanges, collaborative research projects, and international internships. Through their expertise and networks, academic staff will connect students with opportunities to work alongside international scholars and professionals, gaining invaluable insights and experiences that broaden their perspectives and deepen their understanding of global issues. Additionally, academic staff may spearhead joint research initiatives, organize international conferences, and coordinate study abroad programs, providing students with transformative learning experiences that transcend borders. By championing international collaboration, academic staff contribute to the program's mission of preparing students to excel in a globalized world, equipping them with the skills and cultural competency needed to thrive in diverse and interconnected environments. The teaching groups will have the opportunity to communicate and connect with each other, helping them to expand their network to a global scale.

V. EXCHANGE PROGRAMS AND PARTNERSHIPS

The academic staff will actively provide students with enriching international experiences and contribute to the program's commitment of providing students with a global perspective, preparing them to excel in their academic and professional endeavors on an international scale.

Opportunities include:

- <u>Student Exchange</u>: Academic staff collaborate with partner universities worldwide to establish student exchange. Through our program, students have the opportunity to study abroad for a semester or academic year, immersing themselves in different academic and cultural environments while earning credits towards their degree.
- <u>Research Collaborations</u>: Academic staff engage in collaborative research projects with scholars and researchers from partner institutions across the globe. These collaborations facilitate knowledge exchange, joint publications, and interdisciplinary research efforts that address complex challenges in data analysis, environmental governance and finance.
- <u>International Conferences and Workshops</u>: Academic staff organize and participate in international conferences, workshops, and seminars that bring together scholars, practitioners, and industry experts from around the world. These events serve as platforms for sharing research findings, networking and exploring collaboration opportunities.
- <u>Industry Partnerships</u>: Academic staff may have the chance to collaborate with industry partners on international projects, internships, and research initiatives.









FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE VI. FACULTY MOBILITY AND EXCHANGE OPPORTUNITIES

The Partner Universities shall handle, through their international offices or comparable departments at the faculty/university level, the visa and residence permit requirements for the FINDATA Programme students. Students shall be contacted in due time to submit the necessary documents.

The Partner Universities shall assist students in finding suitable accommodation for them, and if necessary, for their family during the period of their stay. Such assistance may consist of providing contacts. The students pay for their accommodation and catering.

The Partner Universities shall supply students, no later than the day of their arrival, with information on every issue relevant for their stay.

Each FINDATA Programme student shall receive a student card from every Partner University where the student spends a semester and be entitled to the same services and facilities as the other students enrolled at the Partner University. The Partner Universities agree that a welcome meeting shall be organised at the beginning of each term.

The Partner Universities shall send at least one visiting scholar to present the courses taught by their university in the FINDATA Study Programme and the respective specialisation (in case of LUMSA and Vilnius University) during the Introductory week before the start of the first semester. Further, at least one visiting scholar should represent each Partner University at the Summer school after the second semester to present the diploma thesis topics offered by the scholars at their Partner University. Further scholars may visit other Partner Universities for other purposes during the course of the year when they find in necessary or useful for the quality of the programme.

Visiting scholars shall receive office space and access to the same teaching/research facilities as those available to the Partner University's staff.

International offices or comparable departments at the faculty/university level shall be responsible for providing students and scholars with special needs/disabilities with the necessary assistance. They shall also assist students and scholars in arranging medical services, when needed.

The minimum requirements for student insurances for EMJM scholarship holders as given by the EACEA for EMJM programmes will be followed. The costs shall be borne by the Consortium.

Each Partner University releases and grants each FINDATA programme's student, studying in that Partner University, a Transcript of Records indicating his/her academic performances and number of credits obtained at the Partner University.









FINDATA FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE VII. RESEARCH ETHICS AND INTEGRITY

Integrity and ethics are paramount in the research conducted within this program, serving as foundational principles that guide scholarly inquiry and academic excellence. Academic staff and students are committed to upholding the highest standards of integrity, honesty, and ethical conduct in all aspects of research, from data collection and analysis to dissemination of findings. Researchers adhere to rigorous ethical guidelines and protocols established by regulatory bodies and professional organizations, ensuring the protection of human subjects, the responsible use of data, and the preservation of intellectual property rights. Moreover, academic staff actively promote a culture of transparency, accountability, and integrity in research practices, fostering open dialogue and collaboration among scholars. By prioritizing integrity and ethics in research, the program not only advances knowledge and innovation but also upholds the trust and credibility of the academic community and society at large.

Plagiarism will not be tolerated by any of the universities and shall one Partner University if the University become suspicious, it will inform the Coordinator and other Partner Universities before taking disciplinary action against the student. Shall it be discovered only after the diploma has been granted, the rules applicable under Czech law leading to withdrawal of the diploma after the procedure envisaged by the law will be applied.











FINDATA FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE 9. QUALITY ASSURANCE AND ACCREDITATION

I. PROGRAMME ACCREDITATION PROCCESS

Quality assurance shall be considered both at local and consortium level. Each Partner University carries out the FINDATA Programme assessment and accreditation procedures in collaboration with all other Partner Universities taking into consideration the different legislative requirements of the countries.

At local level the quality of the FINDATA programme is ensured through internal systems for quality assurance in studies at all Partner Universities. Education Quality Assurance Committees of each Partner University working under the local legislative requirements and internal rules of the Partner Universities shall monitor the quality of the education in the FINDATA Programme, based on formal evaluations of the education anonymously filled out by the students and other available data. In addition to the written student evaluation after the end of the semester the lecturers will be stimulated to hear the voice of the students personally already during the course of the semester. Lecturers are also expected to react if some aspects of their courses are not evaluated positively by the students.

Globally at the consortium level, the implementation of Programme's goals, permanent supervision and improvement of quality assurance of the Programme, is realized by the Joint Management Steering Committee. Its role is to ensure the overall quality of the FINDATA Programme and that the FINDATA Programme curriculum responds to the needs of students, and the labour market. Implementing these functions, the Joint Management Steering Committee collaborates with the Board of Directors.











FINDATA FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE II. QUALITY ASSURANCE MECHANISMS

The coordination of study process in each Partner University is delegated to the FINDATA Programme Guarantor appointed for the purposes of accreditation procedure by each Partner University.

The Programme Guarantor informs and consults students and lecturers on the issues, related to the study documents, organisation of study process and students' and teachers' residence during their mobility, etc. He/she also provides the information about the FINDATA Programme implementation to the Board of Directors., participates in its meetings and quality assurance events.

Quality assurance deals with individual courses (e.g. content relevance, quality of course material, effectiveness in training the targeted skills), lecturers, composition of the programme, difficulties arising from mobilities (issues of examinations and teaching schemes), facilities provided by the Partner Universities to the students.

Shall there be different approaches to quality assurance issues at the local level, the final decisions, concerning the quality assurance issue of the FINDATA Programme at the consortium level, are made by the Board of Directors. It shall be informed by the Director of the respective Partner University shall its Education Quality Assurance Committee have any concerns or raise issues regarding the quality of the FINDATA programme. The Board of Directors needs to decide in accordance with the legislation applicable at the Coordinator and other Partner Universities.

III. <u>CONTINUOUS IMPROVEMENT STRATEGIES</u>

We aim to improve continuously therefore we have set some strategies that are integral to quality assurance efforts in educational programs. These strategies involve ongoing assessment, evaluation, and refinement of processes to enhance program effectiveness and meet evolving standards. By systematically collecting feedback, analyzing data on student outcomes, and benchmarking against industry best practices, our educational institutions can identify areas for improvement and implement targeted interventions. Regular review of curriculum, teaching methods, student support services, and administrative procedures ensures alignment with program objectives and the needs of students and employers. Furthermore, fostering a culture of continuous improvement encourages collaboration, innovation, and accountability among faculty, staff, and students, ultimately leading to the delivery of high-quality education and the achievement of program goals.









FINDATA FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE **CONCLUSION AND CONTACT INFORMATION** *10*.

Thank you for your commitment to the Joint Master program. Your contributions are essential to the success and reputation of the program. If you have any questions or require further assistance, please do not hesitate to contact the program coordinators or administrators.



WEBSITE; https://www.emfindata.eu/











11.ANNEXES

LIST OF COMPULSORY COURSES AND ELECTIVE COURSES

A/A	COURSE
1	Economics and Financial Aspects of Innovation and Sustainability
2	Principles of Artificial Intelligence and Machine Learning
3	Applied Financial Econometrics
4	EU Law and European Values
5	Research Methods
6	Principles of programming for R
7	International Finance and Macroeconomics
8	Computational Finance
9	Big Data Analytics in Finance
10	Machine Learning in Finance
11	Programming for Python
12	Innovation in Banking and FINTECH
13	Sustainable Finance and Investments
14	Advanced Corporate Finance
15	Ethics and Humanism in Digital Era
16	Financial Risk Management
17	Corporate Strategy and Sustainability
18	Integrity and Ethics in Finance
19	Behavioural Finance for Sustainable Development
20	Technical Analysis of Financial Markets
21	Investing for Environmental and Social Impact
22	Financial Technologies and Alternative Investments
23	Equity Securities
24	Investment Portfolio Analysis
25	Master diploma thesis









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COURSE DESCRIPTIONS

Course Title	Economics and Financial Aspects of Innovations and Sustainability					
Course Code	N/A					
Course Type	Compulsory					
Level	Master (2 nd Cy	ycle)				
Year / Semester	1 st Year / 1 st S	emester				
Teacher's Name	Viktor Prokop)				
ECTS	5	Lectures / week	2 Hours / 13 weeks	Laboratories / week	2 Hours / 13 weeks	
Course Purpose and Objectives	13 weeksweek13 weeksThe aim of the course is to provide students with the knowledge about the economic and financial aspects of innovation and sustainable development, cooperation at the university-industry-government level, the emergence of innovative ecosystems, also based on the principles of sustainability and circular economy, measuring the (eco-) innovation performance of different entities, and the role of the public sector as one of the donors of these processes. A student who has successfully completed the course can explain the principles on which the main regional economic theories are based; describe the main determinants of (eco-) innovation activities; distinguish the role of different types of intellectual capital; describe the main theoretical concepts dealing with the creation of (eco-) innovations at the national and regional level; explain the causes of (eco-) innovation failure of companies and states; 					
Learning Outcomes	 Upon successful completion of this course students should be able to: identify and list the circumstances and causes that affect (eco-) innovation processes at regional, national, EU levels. interpret the economic and financial problems encountered by individual actors of cooperation at the level of university, industry, government; apply the results of competitiveness and (eco-) innovation performance analyses at firm, regional, and country levels: 					











	 graphically interpret the scheme of the innovation ecosystem and describe the individual links that arise within this ecosystem; formulate opinions on (eco-) innovation processes and identify factors that influence the course of these processes; be properly oriented in the issues of financial support for cooperation, knowledge creation, and (eco-) innovation; propose ways that will lead to more efficient spending of public funds to support research and development and (eco-) innovation. 				
Prerequisites	None Co-requisites None				
Course Content	 The course content is developed as follows: Theories and models of economic and regional development and competitiveness. Production function and its factors - role of intellectual capital, human capital, and labor mobility. Innovation and its determinants, open vs. closed innovation concepts. Sustainability- and circular economy-oriented innovation and the growing role of environmental behavior. National and regional innovation ecosystems and its transition towards sustainability. Regional innovation policy and governance, economic and financial aspects of (eco-) innovation. Public funding for innovation, R&D subsidies, government financial and non-financial support for (eco-) innovation. Networking and cooperation, university-industry-government relationships, the role of environmental stakeholders. Measuring and monitoring innovation performance and regional competitiveness. Research and (eco-) innovation contribution to the achievement of the Sustainable Development Goals. 				
Teaching Methodology	Face-to-Face				
Bibliography	 Compulsory literature Prokop, V., Stejskal, J., Horbach, J., & Gerstlberger, W. Business Models for the Circular Economy: A European Perspective. Springer Nature. STEJSKAL, J., HAJEK, P., HUDEC, O. Knowledge spillovers in regional innovation systems. Berlin: Springer. Recommended literature Urbano, D., Aparicio, S., Audretsch, D. B. Institutions, entrepreneurship, and economic performance. Springer International Publishing. Capello, R., Nijkamp, P. Handbook of Regional Growth and Development Theories. Cheltenham: Edward Elgar Publishing. 				









	Horbach, J., & Reif, C New developments in eco-innovation research.					
	Springer International Publishing.					
Assessment	The assessment of student has two steps:					
	Examination	60%				
	Assignments	40%				
	1.	100%				
Language	English					

Course Title	Principles of Artificial Intelligence and Machine Learning						
Course Code	N/A						
Course Type	Compulsory						
Level	Master (2 nd C	ycle)					
Year / Semester	1 st Year / 1 st S	Semester					
Teacher's Name	Petr Hájek						
ECTS	5	Lectures / week	2 Hours / 13 weeks	Laboratories / week	2 Hours / 13 weeks		
Course Purpose and Objectives	The aim of t intelligence a design of inte course can ex methods; cha approaches to fuzzy inferen models; char distinguish in of artificial an	The aim of the course is to acquaint students with principles of artificial intelligence and machine learning and possibilities of their application in the design of intelligent systems. A student who has successfully completed the course can explain the principles of artificial and computational intelligence methods; characterize and distinguish between probabilistic and fuzzy approaches to handling uncertainty; describe the structure and behavior of fuzzy inference systems; categorize and compare different neural network models; characterize evolutionary stochastic optimization algorithms and distinguish individual algorithms; compare the advantages and disadvantages of artificial and computational intelligence methods.					
Learning Outcomes	Upon success derive and pr	ful completion of thi knowledge using the redicate fuzzy logic of	s course stud inference rul of the first orc	ents should be able les of propositional ler;	e to: fuzzy logic		









	 design a knowledge base of an expert system in a logical programming language; design a suitable neural network structure for a given task and train it on pre-processed structured and unstructured data; design the objective function and optimize the task using evolutionary stochastic optimization algorithms; design a hybrid intelligent system taking advantage of the combination of different methods of artificial and computational intelligence. 					
Prerequisites	None	Co-requisites	None			
Course Content	 The course content is developed as follows: Artificial intelligence and computational intelligence. Machine learning, classification and prediction tasks. Data analytics using machine learning. Neural network models. The learning process of neural networks. Deep learning. Fuzzy sets and fuzzy inference systems. Evolutionary stochastic optimization algorithms. Hybrid systems. Expert systems and knowledge-based systems. Examples of intelligent systems in financial domain. 					
Teaching Methodology	Face-to-Face					
Bibliography	Compulsory literature kruse et al. Computational intelligence: A methodological introduction. London: Springer. Engelbrecht, A. P. Computational intelligence: An introduction. Chichester: John Wiley & Sons. Negnevitsky, M. Artificial intelligence: A guide to intelligent systems. Harlow: Pearson Education. Recommended literature RUTKOWSKI, L. Computational intelligence: Methods and Techniques. Berlin: Springer Verlag, (Latest Edition).					
Assessment	Examination Assignments	60% 40% 1009	6			
Language	English					









Course Title	Applied Final	ncial Econome	etrics			
Course Code	N/A					
Course Type	Compulsory					
Level	Master (2 nd C	ycle)				
Year / Semester	1 st Year / 1 st S	Semester				
Teacher's Name	Jana Heckenb	ergerová				
ECTS	5	Lectures / we	eek	1 Hours / 13 weeks	Laboratories / week	3 Hours / 13 weeks
Course Purpose and Objectives	The aim of th methods appl	e course is to icable to the a	acquai nalysis	nt students w of economic	ith statistical and e and financial time	econometric series.
Learning Outcomes	 Upon successful completion of this course students should be able to: construct an econometric model describing the dependence between economic variables, assess the quality of the econometric model and its ability to represent the modelled reality, interpret the econometric model and the estimated parameters, predict the evolution of economic variables based on simple time series models. 					
Prerequisites	None		Co-re	quisites	None	
Course Content	 The course content is developed as follows: Introduction to econometrics – socio-economic phenomena analyses Classical Gaussian linear regression model. Nonlinear models. Logistic regression and its utilization. Autocorrelation methods for univariate time series. Box-Jenkins methodology – basic models and their construction. Multivariate time series. Vector autoregression. Granger Test of Causality. Introduction to panel data analysis - dynamic panel data models. Unit root analysis. Stochastic processes in econometrics – Markov processes, Poisson process, random walk, Brownian process. Modeling the development of financial assets. Simulation of the development of interest rates - Vašiček's model and its augmentations. Black-Scholes model. 					









Teaching Methodology	Face-to-Face					
Bibliography	Compulsory literature KENNEDY, P. A guide to economerics. 6 (Latest Edition) ASHLEY, R. A. Fundamentals of applied (Latest Edition). MADDALA, G. S. Introduction to econom (Latest Edition) Recommended literature KLEIBER, C., ZEILEIS, A. Applied economerics. C Springer. HENDRY, D. F. Dynamic econometrics. C JOHNSTON, J., DiNARDO, J. Econome McGraw-Hill. SALVATORE, D., REAGLE, D. Statistic York: McGraw-Hill.	5. vyd. Madden: V d econometrics. F netrics. 3. vyd. Ch conometrics with Oxford: Oxford Un tric methods. 4. v	Wiley-Blackwell, Hoboken: Wiley, nichester: Wiley, R. New York: niversity Press. vyd. New York: cs. 2. vyd. New			
Assessment	Examination Assignments	60% 40% 100%				
Language	English					

Course Title

EU Law and European Values









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Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd C	ycle)			
Year / Semester	1 st Year / 1 st S	Semester			
Teacher's Name	Jana Janderov	vá			
ECTS	5	Lectures / week	2 Hours / 13 weeks	Seminars / week	2 Hours / 13 weeks
Course Purpose and Objectives	The aim of the course is to acquaint students with fundamentals of EU law and its principles, values the EU is based on, and the basics of EU regulation in the field of finance. A student who has successfully completed the course can explain which are the sources of EU law, what are the relationships between the different sources and how they interact with national legal orders; describe the values EU is based on; explain the nature and character of the general principles of EU law; characterize the institutions of the European Union, including their powers and competences; justify the need for harmonization of EU law; explain the forms and methods of harmonization, and the application and interpretation of EU law at national and EU level; compare the different types of action before the Court of Justice of the EU, in particular in terms of their objective; explain the nature of the Single Market and the legal instruments in the area of the four fundamental freedoms of the EU; distinguish between different anti- competitive practices; characterize EU consumer protection policy in the field of finance; characterize fundamental rules of EU banking and financial law; compare the advantages and disadvantages of EMU.				
Learning Outcomes	 Upon successful completion of this course students should be able to: independently search for EU legislation and relevant case law; interpret a simple judgment of the CJEU, including its implications for Member States, in a clear way; identify fundamental inconsistencies between legal actions and EU law in selected areas (in particular competition and financial and banking law) and suggest ways of eliminating them; practically solve real legal problems involving the assertion of rights arising from human rights and the free movement of goods, persons, services and capital; write an essay that critically analyses relevant issues of EU banking and financial law. 				
Prerequisites	None	Co-r	equisites	None	











Course Content	 The course content is developed as follows: EU historical development and its aim to promote peace, its values and the well-being of its peoples Fundamental values – respect for human dignity, freedom, democracy, equality, the rule of law Human rights protection EU institutions - powers Sources of EU law and specific principles of its application Harmonization and Court of Justice role in interpretation Free movement of goods, persons, services, and capital Protection of competition Regulations for exchange and investment controls Integration of banking, insurance, and investment services Consumer protection and competition rules within the EU regarding financial services Establishment of the economic and monetary union
Teaching Methodology	Face-to-Face
Bibliography	Compulsory literature Treaty on European Union Treaty on the Functioning of the European Union. Chalmers, D., Davies G., Monti G.European Union Law. Fourth Edition. Cambridge: Cambridge University Press. Case law list (approx. 25 cases) shall be provided during the first seminar and available from the CJEU internet pages. Recommended literature VEIL et al. (Latest Edition). European Capital Markets Law (2nd ed.). Bloomsbury Publishing. ISBN: 978-1-50995-848-1
Assessment	Examination60%Assignments40%100%
Language	English

Course Title

Research Methods







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Course Code	N/A					
Course Type	Compulsory					
Level	Master (2 nd C	ycle)				
Year / Semester	1 st Year / 1 st S	Semester				
Teacher's Name	Jan Stejskal					
ECTS	5	Lectures / week	2 Hours / 13 weeks	Laboratories / week	2 Hours / 13 weeks	
Course Purpose and Objectives	The aim of this course is to present research approaches, research methodology and a wide range of research methods and procedures that will enable students to acquire the tools to carry out analytical activities in the field of economics and finance. An essential part of the goal is to explain to students how to choose an appropriate method, modelling and implementing of economic strategies corresponding to a particular problem, analysis and assessment of regional research and reports on economic issues under implementation, formation of independent work abilities and erudition, systematic view to the qualitative and quantitative research paradigms and their place in the field of economics and finance. A student who has successfully completed the course can apply knowledge and abilities of research methods when professionally analyse and evaluate reports on economics issues, implemented programs and their reports, reports of applied research, presented in professional and scientific literature, discussing on both general issues of scientific cognition both particular development and economic research cases, showing critical view on research methodology and results analysis; know typological diversity of research, research strategies, specificity of the economy and finance and are able to apply correctly these					
Learning Outcomes	 Upon successful completion of this course students should be able to: notice theoretical problems of cognition in the field of economics and finance; identify of theoretical and practical problems in the socioeconomical policy and finance and their implementation, to conceptualise them formulating problem questions and hypotheses: 					
	 normulating problem questions and hypotheses; model research strategy, creates research design and professionally perform empirical research; on the ground of research data, to apply data analysis methodology and data analysis software both for quantitative, both for qualitative or mixed research approach; discuss with profesional auditory about economy research methodology issues 					









Prerequisites	None	Co-requisites	None	
Course Content	 The course content is developed as follows: The Introduction to Research Methodology The Selection of a Research Approach Review of the Literature Quantitative Research Methods in the field of Economics and Finance Qualitative Research Methods in the field of Economics and Finance Mixed Research Approach in the field of Economics and Finance Research Design. The Purpose Statement. Research Questions and Hypotheses Writing Strategies and Research Ethics Major Principles and Methods of Qualitative Data Analysis with Selected Software 			
Teaching Methodology	Face-to-Face			
Bibliography	Compulsory literature Tan, W. C. K Research methods: A practical guide for students and researchers. World Scientific. Recommended literature Pajo, B. Introduction to research methods: A hands-on approach. Sage publications. Bell, E., Bryman, A., & Harley, B. Business research methods. Oxford university press. Vásquez, C. (Ed.)Research methods for digital discourse analysis. Bloomsbury Publishing			
Assessment	Examination Assignments	60% 40% 100	%	
Language	English			

Course Title

Principles of Programming for R











Course Code	N/A					
Course Type	Elective	Elective				
Level	Master (2 nd C	ycle)				
Year / Semester	1 st Year / 1 st S	Semester				
Teacher's Name	Hana Kopáčk	ová				
ECTS	5	Lectures / week	1 Hours / 13 weeks	Laboratories / week	2 Hours / 13 weeks	
Course Purpose and Objectives	 The course aims to introduce students to the key theoretical concepts of the data science discipline. The course specifically focuses on R programming with the emphasize on the financial data analytics. A student who has successfully completed the course can explain the principles of the problem decomposition; describe the fundamentals of data management in financial data analytics; describe main characteristics of statistical computing in R language; categorize and compare different data exploration and visualization methods in R; describe the process of model building in R; characterize different approaches in financial data analytics. Upon successful completion of this course students should be able to: structure complex problems; define and extract appropriate data for the analysis; design and implement basic algorithms in R; use functions from main packages to explore and visualize the data in R; 					
Prerequisites	None	Co-re	equisites	None		
Course Content	 The course content is developed as follows: Definition and decomposition of problems. Fundamental components of algorithms and design methods. Data selection and extraction for financial data analytics. Data types and data structures. Overview of R language – introduction to statistical computing Review of the main packages and key points in R Data import and preparation (cleaning, transformation) Basic Plotting and visualization Exploring the data Building the model Financial data analytics – use cases 					









Teaching Methodology	Face-to-Face		
Bibliography	Compulsory literature Wickham, H., & Grolemund, G. R for data science: import, tidy, transform, visualize, and model data. O'Reilly Media, Inc. Recommended literature GENTLE, J.E. R for Data Science and Applications in Finance. Fairfax County, Virginia		
Assessment	Examination Assignments	60% 40% 100%	
Language	English		

Course Title	International Finance and Macroeconomics
Course Code	N/A
Course Type	Electives
Level	Master (2 nd Cycle)
Year / Semester	1 st Year / 1 st Semester
Teacher's Name	Liběna Černohorská, Solomon Gyamfi











ECTS	5	Lectures / week	2 Hours / 13 weeks	Laboratories / week	2 Hours / 13 weeks
Course Purpose and Objectives	 The aim of the course is to provide a broader knowledge of international monetary relations and macroeconomic principles. A student who has successfully completed the course can: explain the historical context and importance of exchange rates; characterize balance of payments; characterize the exchange market; characterize foreign exchange operations; explain the historical development of international monetary system, explain macroeconomics policies, aims and tools. be orientated in the field of international finance and macroeconomics; analyze the historical development of monetary system; interpret the importance of international finance for economic entities, evaluate effectiveness of monetary and fiscal policy. 				
Learning Outcomes	 Upon successful completion of this course students should be able to: use their expertise and skills to solve the problems of international finance and macroeconomics; comprehensibly and convincingly to experts and laymen information about the kind of professional problems in the field of internatioanl finance and macroeconomics and their own opinion on their solution. 				
Prerequisites	None	Co-r	equisites	None	
Course Content	The course co Macro Macro Intern Histor Bretto of pay Excha short techni Foreig interv Excha promp Finand	ontent is developed beconomic trends, concerning policy, a ational finance, cha tical development inwood institutions, ments, concept, streaments, balancing po- inge rate, its system period, manageme cal analysis of exchange cal analysis of exchange ention of central balancing market, its struct ot, foreign exchange cial Globalization: Concerning cal analysis of exchange	as follows: naracteristic and ims and tools. racteristic and of intern Euro, Europe ucture, balance rocesses. as, determinant ent of excha ange rate. es, its structur nk. eture, foreign e expositions and opportunity and cell-Fleming model	nd basic range of pro- basic range of pro- pational monetary an Monetary Unio- be, factors influence ats, exchange rate nge rates, fundar e and managemen exchange operation nd hazards. ad Crisis. odel).	roblems. blems. y system, n. Balance ing balance in long and mental and t, exchange s - term and











Teaching Methodology	Face-to-Face			
Bibliography	Compulsory literature Krugman, P. R., Obstfeld, M. Melitz M. J. International Finance Theory and Policy. Harlow: Pearson. Parkin, M. Economics. Boston: Pearson. Recommended literature Eiteman, D. K., Stonehill, A. I., Moffett, J. H.Multinational Business Finance. Harlow: Pearson Gandolfo, G International Finance and Open Economy Macroeconomics. Darlin: Springer Varlag Barlin Heidelbarg			
Assessment	Examination Assignments	60% 40% 100%		
Language	English			

Course Title	Computational Finance				
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd C	ycle)			
Year / Semester	1 st Year / 2 nd	Semester			
Teacher's Name	Dr. Andreas I	Papayiannis/Dr. Sime	ona Mihai		
ECTS	10	10Lectures / week3 Hours / 14 weeksLaboratories / weekNone			
Course Purpose and Objectives	Students through a students through a students through a student student student students through a student st	ugh this course will b kills and apply those vith the new technolo tochastic modeling w	e able to stud in pricing fin ogical develop vith hands-on	by the scientific corn nancial derivatives pments in this field. practice in R, in or	nputing and and will be The course der to value









Learning Outcomes	 different financial products using the Monte Carlo and Binomial Tree methods, perform variance reduction techniques and other advanced quantitative methods. Direct Market Access is introduced to students with the applications in electronic trading. Upon successful completion of this course students should be able to: Manage basic scientific computing skills; Simulate the financial products' dynamics and implementing pricing models of derivatives through Monte Carlo method and Binomial Trees; Implement the computing tools to program Manage the direct market access; Understand, apply and critically evaluate the algorithmic trading systems and trading strategies 					
Prerequisites	None	Co-requisites	None			
Course Content	None Co-requisites None The course content is developed as follows: • • • Refresh on key statistical principles, and introduction to asset prices and stock price dynamics • Introduction to Monte Carlo method and simulations for • generating random numbers, • pricing of European/Vanilla call/put options • pricing of European/Vanilla call/put options • pricing other path-dependent options • studying variance reduction techniques • performing advanced applications in higher dimensions and/or complicated option payoffs • Introduction to the Binomial Tree method for • pricing European/Vanilla call/put options • applications to early-exercise options • hedging derivatives • performing advanced applications in higher dimensions and/or complicated option payoffs • • Introduction to Direct Market Access is introduced to students with basic applications in electronic trading • • theory on orders and algorithms • Implementing trading strategies					
Teaching Methodology	Face-to-Face	Face-to-Face				
Bibliography	Glasserman, P. Monte Carlo Methods in Financial Engineering, Springer. Hull J. C. Options, Futures, and other derivatives, Eighth Edition, Prentice Hall. Ruppert D. and Matteson D. S. Statistics and Data Analysis for Financial Engineering with R examples, Second Edition, Springer.					











	Johnson B. Algorithmic Trading and DMA: An introduction to direct access trading strategies, Latest Edition, 4Myeloma Press.			
Assessment	Examinations Self-Assignments Group Assignment	50% 10% 40% 100%		
Language	English			

Course Title	Big Data Analytics in Finance					
Course Code	N/A					
Course Type	Compulsory					
Level	Master (2 nd C	ycle)				
Year / Semester	1 st Year / 2 nd	1 st Year / 2 nd Semester				
Teacher's Name	Dr. Alexis Ky	Dr. Alexis Kythreotis				
ECTS	10	10Lectures / week3 Hours / 14 weeksLaboratories / weekNone				
Course Purpose and Objectives	This course introduces students to the basic concepts, methods and approaches of data analytics in Accounting and Finance. The students will program and test business intelligence software, such as Google data studio or/and Tableau or/and Alteryx or/and Power BI. Through the software, the students will learn to prepare, clean, analyse and summarize the accounting and financial data and create					











	visualizations. Moreover, students will be familiarized with relevant conceptual IT				
	frameworks in order to eva	aluate the functionality	y and effectiveness of Accounting		
	Information Systems (AIS), and to analyze the contemporary security and control				
	aspects of such systems.				
Learning Outcomes	 Upon successful completion of this course students should be able to: Collect (using EIKON database of Thomson Reuters / S&P Capital IQ Platform), clean and transform accounting and financial data; Summarize, visualize and present accounting and financial data; Analyze accounting and financial data with basic analytical approaches; Obtain the knowledge required to function as a systems accountant; Evaluate and apply the knowledge of management support systems to accounting and related areas; Analyse and critically evaluate the current development of enterprise-wide systems and their contribution to business process reengineering; Apply and test well-known systems development methodologies for AIS 				
	 implementations; Program and test business intelligence software, such as Google data studic or/and Tableau or/and Alteryx or/and Power BI. Critically evaluate the accounting controls and accurity measures in AIS. 				
Prerequisites	AEM600,AEM610, AEM620	Co-requisites	None		
Course Content	The course content is devel	loped as follows:			
	Data preparation and clean summarization.	ning; Data analytics a	pproaches; Data visualization and		
	Diagnostic, predictive and prescriptive analytics in managerial and financial accounting.				
	Fundamental concepts of A	accounting Informatio	n Systems (AIS)		
	Contemporary Enterprise Resource Planning systems (ERP).				
	AIS application to major transaction cycles. The Revenue Cycle. The Expenditure Cycle. The Financial Reporting Systems.				
	Management decision supp	ort systems and Busir	ness Intelligence (BI)		
	Contemporary systems development development of the cycle. Prototyping. End	elopment methodolog l-user Development.	ies for AIS. Software development		









	Ethics, Fraud and IT controls.				
	Hands-on EIKON database / S&P Capital	IQ Platform.			
	Hands-on visualisation software – Google data studio or/and Tableau or/and Alteryx or/and Power BI.				
Teaching Methodology	Face-to-Face				
Bibliography	 Richardson, Teeter and Terrell. Data Analytics for Accounting, McGraw-Hill. J.A. Hall, Accounting Information Systems, Cengage Learning. J.A. Hall, Information Technology Auditing, Cengage Learning. M.B. Romney and P.J. Steinbart, Accounting Information Systems, Pearson. K.C. Laudon and J.P. Laudon, MIS: Managing the Digital Firm, Global Edition, latest edition, Pearson 				
Assessment	Examinations Assignments Class Participation and Attendance	50% 40% 10% 100%			
Language	English	<u> </u>			

Course Title	Machine Learning in Finance					
Course Code	N/A					
Course Type	Elective					
Level	Master (2 nd cycle)					
Year / Semester	2 nd Year / 3 rd Semester					
Teacher's Name	Dr. Klea Panayidou					
ECTS	10	Lectures / week	3 Hours / 14	Laboratories /	None	
			weeks	week		
Course Purpose Objectives	The course introduces the fundamental concepts, theory, and algorithmic ideas of Learning. It provides the student both with a foundation for either applying ML tech real-world problem or performing research on developing novel ML algorithms. It a a foundation for several other Data Science and AI courses, including advanced topi					









natural language processing, Big Data Analytics and others. Specifically, the course for supervised classification techniques, basic and advanced classifiers (logistic regression Bayes classifier, K-nearest neighbors, support vector machines, decision trees, random statistical hypothesis testing, metrics of performance (ROC curves and AUC), estin performance and tuning of hyper-parameters (cross-validation, nested cross validat bootstrap bias corrected CV), and feature selection (forward-backward search orthogonal matching pursuit).						
 Upon successful completion of this course students should be able to: Define basic ML tasks and types of analysis, such as supervised learning, unsu learning, reinforcement learning, classification and regression, and feature sele Discuss the inner workings of standard ML classification and feature sele Discuss the inner workings of standard ML classification and feature sele Illustrate how to solve the problem of selecting algorithms, tuning their parameters, and estimating the performance of the final predictive model. Perform and apply ML pipelines to real-world problems, dealing with proble as representing the problems as an ML task, representing appropriately t applying and tuning an ML pipeline, and interpreting results. Define key statistical estimation and hypothesis testing concepts, with a focu ones that are routinely employed within ML algorithms. Have a solid, foundational basis to perform ML research and proceed with other that employ ML algorithms and concepts. 						
None	Co-requisites	None				
 The course content is developed as follows: 1) Introduction to ML, supervised, unsupervised, reinforcement learning, hypothe spaces, examples of ML applications 2) Probability theory and concepts for ML, axioms of probability, conditional Bayes theorem, maximum likelihood estimation, maximum a posteriori estimation 3) Logistic Regression and fitting with gradient descent 4) Hypothesis testing, and permutation-based hypothesis testing 5) Naïve Bayes and K-Nearest Neighbors 6) Decision Trees and Random Forests 7) Metrics of performance, Receiver Operating Characteristic Curves (ROC), and the ROC curve 8 and 9) Estimation of performance and hyper-parameter tuning using cross 						
	 natural language processing supervised classification to Bayes classifier, K-nearest statistical hypothesis testing performance and tuning or bootstrap bias corrected orthogonal matching pursus Upon successful completion Define basic ML ta learning, reinforcer Discuss the inner algorithms. Illustrate how to parameters, and est Perform and apply as representing the applying and tuning Define key statistic ones that are routin Have a solid, found that employ ML algorithms as representing the applying and tuning Define key statistic ones that are routin Have a solid, found that employ ML algorithms are routing Introduction to ML, sup spaces, examples of ML apply and the section and apply and the section of ML apply apply and the section of ML apply and the section of ML apply apply apply and the section of ML apply apply apply and the section of ML apply apply apply apply apply apply and the section of ML apply a	natural language processing, Big Data Analytics a supervised classification techniques, basic and a Bayes classifier, K-nearest neighbors, support vec statistical hypothesis testing, metrics of perform performance and tuning of hyper-parameters (c bootstrap bias corrected CV), and feature sorthogonal matching pursuit). Upon successful completion of this course studer • Define basic ML tasks and types of analysilearning, reinforcement learning, classific • Discuss the inner workings of standarial algorithms. • Illustrate how to solve the problem on parameters, and estimating the performant • Perform and apply ML pipelines to realas representing the problems as an MI applying and tuning an ML pipeline, and • Define key statistical estimation and hypones that are routinely employed within M. • Have a solid, foundational basis to perform that employ ML algorithms and concepts. None Co-requisites The course content is developed as follows: 1) Introduction to ML, supervised, unsupervised, spaces, examples of ML applications 2) Probability theory and concepts for ML, axis Bayes theorem, maximum likelihood estimation, 3) Logistic Regression and fitting with gradient of the ROC curve 8 and 9) Estimation of performance, and hyperity of the ROC curve 8 and 9) Estimation of performance and hyperity of the ROC curve				









	10) Basics of optimization and constrained optimization						
	11, 12) Support Vector Machines						
	13) Basic Feature Selection						
	All lectures will consist of a theoretical part presenting concepts and techniques an part were the ML techniques will be applied for problem solving.						
Teaching	Face to Face						
Methodology							
Bibliography	Machine Learning, Tom Mitchell, McGraw Hill, Latest Edition						
	Pattern Recognition and Machine Learning, Christopher Bishop, Springer, Latest Edi						
	The Elements of Statistical Learning, Jerome H. Friedman, Robert Tibshirani, a Hastie, Latest Edition, Springer An Introduction to Statistical Learning, with Applications in R. Gareth James, Danie Trevor Hastie and Robert Tibshirani, Springer, Latest Edition						
Assessment	Examinations	50%					
	Class Participation and Attendance	40% 10% 100%					
Language	English						

Course Title	Programming for Python					
Course Code	N/A					
Course Type	Compulsory					
Level	Master (2 nd Cycle)					
Year / Semester	1 st Year / 1 st Semester					
Teacher's Name	Dr. Andreas Papayiannis					
ECTS	10	Lectures / week	3 Hours / 14 weeks	Laboratories / week	None	










Course Purpose and Objectives	The course aims to Introduce students to the key theoretical concepts of the computer science discipline from theoretical concepts and areas of study to the role of computer scientists in today's society. The course specifically focuses on Python programming.			
Learning Outcomes	 Upon successful completion of this course student will be able to: Critically assess the key theoretical concepts of the Computer Science discipline; Argue about the role and ethical responsibility of Computer Scientists in our society; Explain and use basic concepts in programming; Construct and execute basic programs in Python; Design and implement basic algorithms in Python; Use external libraries with Python; Use Python to download financial data from web sources; Graphically visualise data and results of statistical calculations 			
Prerequisites	None	Co-requisites	None	
Course Content	 The course content is developed as follows: Key theoretical concepts of the computer science discipline. General introduction to programming and students will learn and practice programming concepts along with tackling practical issues in statistical computing in Python. Programming in Python Review of the main packages and key points in Python Reading and writing efficient code in Python Basic Plotting and visualization The NumPy and Pandas Libraries Introduction to basic statistical applications with practical examples in Python Descriptive statistics Simulations and random numbers Extracting financial data from the web 			
Teaching Methodology	Face-to-Face			
Bibliography	1. Deitel and Deitel: In Learning to Program	ntro to Python for Co n With AI, Big Data a	mputer Science and Data Science, and the Cloud Pearson.	









	2. Python for Data Analysis, W. McKinney, O' Reilly.			
Assessment	Examinations	50%		
	Self-Assignments	10%		
	Group Project	40%		
		100%		
Language	English			

Course Title	Innovation in Banking and Fintech					
Course Code	N/A					
Course Type	Compulsory					
Level	Master (2 nd Cycle)					
Year / Semester	2 st Year / 1 st Semester					
Teacher's Name	Claudio Giannotti					
ECTS	6 Lectures / week 4 Hours / Laboratories / 10 weeks week					
Course Purpose and Objectives	The aim of the course is to provide knowledge and experience on innovation in banking and finance and on the effect of changes in consumer preferences, technology, regulation, and supervisory requirements. This leads to new business models, applications, processes, and services. At the end of the course, students will be able to understand the rules, actors and services that make up the Fintech ecosystem and open finance, and the related changes and perspectives					
Learning Outcomes	 make up the Fintech ecosystem and open finance, and the related changes and perspectives. Upon successful completion of this course, students will be able to: Demonstrate a comprehensive understanding of the fintech ecosystem, including its key components, participants, technologies, and regulatory frameworks. Analyse and assess emerging technologies within the banking and fintech sector, focusing on their potential impacts and practical applications 					









	 Develop innovative strategies for financial institutions, encompassing the creation of business plans for fintech startups and the evaluation of digital transformation initiatives for traditional banks. Navigate the regulatory landscape of fintech and banking, emphasizing compliance, security, data privacy, and ethical considerations in the context of the industry. 						
Prerequisites	None Co-requisites None						
Course Content	 The course content is developed as follows: Innovation in financial system: story and drivers Changes in consumer and business preferences: digital banking experience Big data, Artificial intelligence, and disruptive technologies in finance Supervision and regulation in Fintech, and PSD2 From open banking to open finance Embedded finance, "banking as a service" and "technology as a service" Key players in the financial ecosystem in the platform economy perspective: coopetition Neo banks and incumbents: from the Global Financial Crisis to today Fintech and Techfin Big Tech and other technology providers Other players in the Fintech arena Competitive advantages and business models Fintech, Insurtech and Regtech Payments, lending and other areas of financial services affected by innovation 						
Teaching Methodology	Face-to-Face						
Bibliography	 FSB, Financial Stability Implications from FinTech, 2017 (available on www.fsb.org) Eba, Report On The Impact Of Fintech On Incumbent Credit Institutions' Business Models, 03 July 2018 (available on www.eba.europa.eu) J.C.Crisanto, J.Ehrentraud, M.Fabian, Big techs in finance: regulatory approaches and policy options, FSI Briefs, Financial Stability Institute, BIS, March, 2021 (available on www.bis.org) Teaching notes and other resources will be indicated and provided by lecturer in the classroom. 						









NANCIAL DATA A	NALYTICS
ND SUSTAINABLE	FINANCE

Assessment	The final mark depends on the grade got on the working group and oral exam. The working group consists in deepening a topic of the course or a case study. The project will be usually carried out by two or three students with the supervision and support of the lecturer. During the last lesson, the group must present the study, using a power point document.
	If the mark of the project is at least 18/30, the students take the oral exam discussing the project and answering to one or more questions on the program. The exam is written with a minimum score of 18.
Language	English

Course Title	Sustainable Finance and Investments			
Course Code	N/A			
Course Type	Compulsory			
Level	Master (2 nd Cycle)			
Year / Semester	2 st Year / 1 st Semester			
Teacher's Name	Claudio Giannotti and Giovanni Ferri			
ECTS	6 Lectures / week 4 Hours / Laboratories / week			
Course Purpose and Objectives	The aim of the course is to provide knowledge and experience on the role of the financial system for sustainable development and the banking services and business models functional to promoting sustainability. At the end of the course, students will be able to understand: i) why the financial system is central to achieving sustainability; ii) the overview of the corporate and investment banking activities, the positioning of the services within the banks' business and how all of this relates to sustainable development; iii) the working and mission of the sustainable and responsible investments; iv) the role of taxonomy, information, measurements, and risks in the sustainability transition.			
Learning Outcomes	 Upon successful completion of this course students should be able to: structure complex problems; define and extract appropriate data for the analysis; design and implement basic algorithms in R; 			









	 use functions from main packages to explore and visualize the data in R; build basic model to analyze the data in R. 				
Prerequisites	None	Co-requisites	None		
Course Content	 The course content is developed as follows: Climate and social change and sustainability background Sustainable Development Goals (SDGs), European Green Deal, Next Generation EU and sustainability transition ESG and sustainable finance: definition and role in the SDGs perspective International and European regulatory framework on sustainable finance Corporate and Investment Banking services: positioning in the banking activities and within the SDGs Sustainable and Responsible Investments (SRI) and Sustainable Debt (Green Bonds, Social Bonds, Sustainability Bonds, Sustainability Linked Bonds) Criteria for classification of a project's sustainability, the environmental impact assessment Sustainability risks and ESG rating European Taxonomy Information as a driver of sustainable finance Non-Financial Reporting and Non-Financial Disclosure Regulation Green washing 				
Teaching Methodology	Face-to-Face				
Bibliography	N. Linciano, P. Soccorso, C. Guagliano, "Information As a Driver of Sustainable Finance: The European Regulatory Framework Copertina. Palgrave Studies.				
	 European Green Deal <u>https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en</u> Platform on Sustainable Finance https://finance.ec.europa.eu/sustainable-finance/overview-gutainable finance/platform gustainable finance, and 				
	Task Force on Climate-related Financial Disclosures				











	 https://www.fsb-tcfd.org/ Teaching notes and other resources will be indicated and provided by lecturer in the classroom 		
Assessment	The working group consists in studying a financial operation or a case study. The project must be usually carried out by two or three students in the classroom with the supervision and support of the lecturer, during the course, in the scheduled dates. During the last lesson (team work), the group must present the study, with a power point document.		
	If the mark of the project is at least 18/30, the students take the oral exam discussing the project and answering one or more questions on the program.		
	In some lessons, materials shall be provided in advance and discussed by students in class, to promote a critical approach to the topics.		
Language	English		

Course Title	Advanced Corporate Finance				
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd C	ycle)			
Year / Semester	2 st Year / 1 st S	Semester			
Teacher's Name	Lucia Gibilar	Lucia Gibilaro and Carolina Gianardi			
ECTS	8 Lectures / week 2 Hours / Laboratories / 1 Hou 20 weeks week 20 week				
Course Purpose and Objectives	The course aims at providing students with theoretical knowledge and practical skills on selected concepts in corporate finance oriented to creating innovative and sustainable developing patterns. Special attention will be devoted to innovative solutions for financing investments in the short and long term, by focusing on digital solutions related to working capital and real estate assets. The course provides an in-deep analysis of start up to lead the students to understand what financing options are available, with a focus on venture capital covering how it works, how to structure a deal, including a focus on the investment evaluation methodology. The course will have strong practical components, based on exercises, review of real case studies, and applications of Big Data analysis				









Learning Outcomes	 Upon successful completion of this course students should be able to: explain the critical factors for fund raising through digital innovative solutions explain the critical factors to attract Venture Capitalist investments select among alternative digital finance solutions for short and long term financial needs select among alternative project for a Venture Capital investment manage a portfolio of start-ups categorize corporate risks and describe risk mitigation instruments 			
Prerequisites	None	Co-requisites	None	
Course Content	 The course content is developed as follows: Evolution of the supply chain finance ecosystem Supply chain payments Technology driven supply chain finance solutions Supply chain finance risk management and optimization Proptech and real estate management Real estate debt and equity crowdfunding Startup Ecosystem Stages of Venture Capital Financing Structure of a Venture Capital Firm (Fund) Deal flow process Evaluation criteria for an investment Investment management 			
Teaching Methodology	Face-to-Face			
Bibliography	 Feld B., Mendelson J (Latest Edition), Venture Deals, Wiley, Hoboken Mattarocci G., Scimone X. (Latest Edition), The New Era of Real Estate, Palgrave Mcmillan, Cham Ramsinghani, M. (Latest Edition), The Business of Venture Capital (3rd ed.), Wiley, Hoboken Sufi X, (Latest Edition), Supply Chain Finance, Springer, Singapore 			
Assessment	Assignment: participation in exercises, completion and successful defence of one group projects. The exam is written with a minimum score of 18.			
Language	English			











Course Title	Ethics and Humanism in the Digital Era					
Course Code	N/A	N/A				
Course Type	Compulsory					
Level	Master (2 nd C	ycle)				
Year / Semester	2 st Year / 1 st S	Semester				
Teacher's Name	Laura Palazza	ani				
ECTS	6	Lectures / week	4 Hours / 10 weeks	Laboratories / week		
Course Purpose and Objectives	The aim of relevance of Technologies	the course is to ac Humanism in th	equaint studen e era of rap	ts with the justif bid development	ication and of Digital	
Learning Outcomes	 Upon successful completion of this course students should be able to: explain the main problems and principles of digital ethics distinguish what is techno-centrism and human-centrism on a philosophical level describe ethical pluralism in the digital debate understand the justification and relevance of the human-centric perspective understand the main ethical problems of ICT, big data, algorithms, AI describe the applications in medicine, economics and law understand the documents on ethics of digital technologies 					
Prerequisites	None Co-requisites None					
Course Content	 The course content is developed as follows: Introduction to ethics applied to digital technologies Analysis of the interdisciplinary and pluralistic debate Technocentric perspective: the technological imperative Human-centrism: philosophical assumptions and justification Technological humanism: the centrality of human in the era of digital technologies The ethical risks of technological digital delegation (deskilling, dehumanization, deresponsabilization) Ethical aspects of ICT (personal identity, interpersonal relationship, digital divide) Ethics of big data (quality of data, privacy, justice) 					









	 Algor-ethics (explainability, transparency, avoidance of bias and discrimination) Ethics of AI (meaningful human control) Examples of applications of digital technologies in medicine, economics and law The role of Committees of ethics in science and new technologies Analysis of documents of experts in EU (European Commission and Council of Europe) Analysis of documents of experts on international level (OECD, UNESCO) Analysis of the existing regulation Analysis of the future regulation (guidelines and draft regulation)
Teaching Methodology	Face-to-Face
Bibliography	Compulsory literature L. PALAZZANI, Innovation in scientific research and emerging technologies: a challenge to ethics and governance, Springer Nature Switzerland AG and G. Giappichelli Editore, Cham (Switzerland). UNESCO, The ethics of Artificial Intelligence. European Group on Ethics in Science and New Technologies (EGE), Statement on Artificial Intelligence, Robotics and so called 'Autonomous' Systems. High Level Expert Group on Artificial Intelligence, Ethics Guidelines for Trustworthy AI.
Assessment	Assignment: elaboration of reports on specific topics. The exam is oral
Language	English

Course Title	Financial Risk Management
Course Code	N/A











Course Type	Elective	Elective			
Level	Master (2 nd Cycle)				
Year / Semester	2 st Year / 1 st S	Semester			
Teacher's Name	Stefano Bonin	ni			
ECTS	4	Lectures / week	4 Hours / 10 weeks	Laboratories / week	
Course Purpose and Objectives	 The course introduces the fundamentals to the management of financial risks under a holistic view of the enterprise. It assumes the basics of strategy and financial management have been covered elsewhere, but builds on the identification, assessment, treatment and control of the different types of financial risks to which financial intermediaries and insurance companies are exposed and the implications deriving from their compound manifestation. Students will be expected to understand the strategic, operational, technical and practical issues of establishing a financial risk framework capable to increase the value of the firm in the long run. The course will have strong practical components, based on numerical exercises, review of real case studies and applications of Big Data. Upon successful completion of this course students should be able to: Understand the distinctive theorical and operational features of a value oriented corporate financial risk management framework Distinguish the different methodological approaches and techniques to risk assessment Develop the knowledge of different kinds of financial risks for an enterprise and draw the implications for the sustainability. Select best instruments/strategies for managing the interaction among financial risks and the corporate sustainability 				
Prerequisites	None	Co-r	equisites	None	
Course Content	 The course content is developed as follows: Introduction to banking and insurance risks (i.e. credit risk, interest rate risk, market risk, operational risk, liquidity risk, reputational risk, strategic risk, cyber risk, climate risk) Models to measure (Value at risk and expected shortfall; discriminant analysis and capital market approaches for credit risk) Stress testing Approaches and instruments to manage risks Risk governance instruments (RAF,ICAAP, ILAAP, Recovery Plan) Capital management and value creation through sustainability Artificial intelligence and machine learning applications to manage banking and insurance risks 				









Teaching Methodology	Face-to-Face
Bibliography	Compulsory literature
	Bessis J Risk Management in Banking, 4th edition, Wiley, Hoboken.
	Myint S., Famery F. The Handbook of Corporate Financial Risk Management, RiskBooks, Research and Markets, Dublin.
	Resti A. Sironi A. Risk Management and Shareholders' Value in Banking: From Risk Measurement Models to Capital Allocation Policies, Wiley, Hoboken.
	Recommended literature
	Du, G., Elston, F. Financial risk assessment to improve the accuracy of financial prediction in the internet financial industry using data analytics models, Operations Management Research, 15, pp. 925–940
Assessment	Assignment: participation in exercises, completion and successful defence of one project. The exam is written with a minimum score of 18.
Language	English

Course Title	Corporate Strategy and Sustainability
Course Code	N/A
Course Type	Elective











Level	Master (2 nd Cycle)					
Year / Semester	2 st Year / 1 st Semester					
Teacher's Name	Oriana Perror	ie				
ECTS	4 Lectures / week 4 Hours / 8 Laboratories / week					
Course Purpose and Objectives	This course aims to facilitate the students in understanding Sustainability in corporate strategies and practices. The purpose of this course is to support the learning process for students interested in responsible business conduct studies. The global scenario, at the economic, political, and social levels, focuses on companies' responsibilities in managing the business activities impacts on the environment and society. The ambition for companies should be to increase sustainability performances, archive competitive advantages, increase the total companies' value, prevent risks in terms of negative impacts, and generate benefits for all.					
Learning Outcomes	 Upon successful completion of this course, students should be able to: examine Sustainability as a system of interdependent concepts derived from communication, management, and the social sciences analyze Sustainability conceptual foundations in contemporary businesses and organizations understand the practicalities of economic and social responsibility, and play a role in shaping responsible businesses 					
Prerequisites	None Co-requisites None					
Course Content	 The course content is developed as follows: an overview of the evolution of Sustainability at the global level and the implications in corporate strategy and business practices. an overview of the international guidelines, frameworks, and principles for MNCs and SMEs to drive Sustainability into the business models and to archive competitive advantages creating value also for the local communities and safeguarding the environment and social rights; knowledge of the mechanisms and procedures to integrate Sustainability into the business models according to the Agenda 2030 and the SDGs, the most recent EU Directives and norms, OECD Guideline, and UN Principles); skills to set out a sustainability strategy that suits the requirements of core stakeholders; 					









Teaching MethodologyFace-to-FaceBibliographyRequired readings: - "Corporate Social Responsibility", McWilliams A., Oxford Researc Encyclopedias, Business and Management, Online Publication Feb 2020 DOI 10.1093/acrefore/9780190224851.013.12 - "Corporate Social Responsibility", Blowfield M .and Murray A., Oxford University Press. - (Freeman, R. E.), "Strategic Management: a stakeholder approach. Cambridge University Press. - Michael E. Porter and Mark R. Kramer "Strategy and Society: The Lin Between Competitive Advantage and Corporate Social Responsibility", Harvard Business Review. 84 (12), 78-92 - Porter, M.E "Creating Shared Value",. Harvard Business Review, 89(1/2) 62-77, 2011		 understanding of the complexity of implementing responsible business conduct in real corporate life (mandatory and voluntary strategies and approaches); adoption of specific terminology in the debate around Sustainability at the institutional and company levels; improvement of critical thinking and analytical skills.
BibliographyRequired readings: - "Corporate Social Responsibility", McWilliams A., Oxford Researc Encyclopedias, Business and Management, Online Publication Feb 2020 DOI 10.1093/acrefore/9780190224851.013.12 - "Corporate Socia Responsibility", Blowfield M .and Murray A., Oxford University Press. - (Freeman, R. E.), "Strategic Management: a stakeholder approach. Cambridge University Press. - Michael E. Porter and Mark R. Kramer "Strategy and Society: The Lin Between Competitive Advantage and Corporate Social Responsibility", Harvard Business Review. 84 (12), 78-92 - Porter, M.E "Creating Shared Value",. Harvard Business Review, 89(1/2) 62-77, 2011	Teaching Methodology	Face-to-Face
 Optional readings: "Corporate Social Responsibility", McWilliams A., Oxford Researc Encyclopedias, Business and Management, Online Publication Feb 2020 DOI 10.1093/acrefore/9780190224851.013.12 Corporate Social Responsibility, Blowfield M .and Murray A., Oxfor University Press, 2019, ISBN: 9780198797753. Also available as Ebook "European Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee an the Committee of the Regions, A renewed EU strategy 2011-14 for Corporat Social Responsibility Communication of the European Commission" Brussels, COM (2011) 681, EU COMM, 2011 - OECD Guidelines for Multinational Enterprises, OECD Publishing, 2011 http://dx.doi.org/10.1787/9789264115415-en ISBN 978-92-64-11528-(print) ISBN 978-92-64-11541-5 (PDF) "Integrated Reporting Quality, an empirical analysis", Pistoni A, Songini L Bavagnoli F., Corporate Social Responsibility and Environmenta Management Journal, 2018, Volume25, Issue4, Pages 489 – 507 Directive 2014/95/EU, https://ec.europa.eu/info/business economyeuro/company-reporting-and-auditing/company-reporting/non-financialreporting_en "The New Political Role of Business in a Globalized World: A Review of New Perspective on CSR and its Implications for the Firm, Governance, an Democracy." Journal of Management Studies, 48(4): 899-931, 2011 (Schere 	Bibliography	 Required readings: "Corporate Social Responsibility", McWilliams A., Oxford Research Encyclopedias, Business and Management, Online Publication Feb 2020 DOI: 10.1093/acrefore/9780190224851.013.12 - "Corporate Social Responsibility", Blowfield M. and Murray A., Oxford University Press. (Freeman, R. E.), "Strategic Management: a stakeholder approach." Cambridge University Press. Michael E. Porter and Mark R. Kramer "Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility", Harvard Business Review. 84 (12), 78-92 Porter, M.E "Creating Shared Value", Harvard Business Review, 89(1/2): 62-77, 2011 Optional readings: "Corporate Social Responsibility", McWilliams A., Oxford Research Encyclopedias, Business and Management, Online Publication Feb 2020 DOI: 10.1093/acrefore/9780190224851.013.12 Corporate Social Responsibility, Blowfield M and Murray A., Oxford University Press, 2019, ISBN: 9780198797753. Also available as Ebook "European Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A renewed EU strategy 2011-14 for Corporate Social Responsibility Communication of the European Commission", Brussels, COM (2011) 681, EU COMM, 2011 - OECD Guidelines for Multinational Enterprises, OECD Publishing, 2011, http://dx.doi.org/10.1787/9789264115415-en ISBN 978-92-64-11528-6 (print) ISBN 978-92-64-11541-5 (PDF) "Integrated Reporting Quality, an empirical analysis", Pistoni A, Songini L., Bavagnoli F., Corporate Social Responsibility and Environmental Management Journal, 2018, Volume25, Issue4, Pages 489 – 507 Directive 2014/95/EU, https://ec.europa.eu/info/business- economyeuro/company-reporting-and-auditing/company-reporting/non- financialreporting_en "The New Political Role of Business in a Globalized World: A Review of a New Perspective on CSR and its Implications for the Firm, G









	 "The Path to Corporate Responsibility," Harvard Business Review (December 2004), (Simon Zadeck) "The how and why of a firm's approach to CSR and sustainability: a case study of a large European company", Songini L., Pistoni A, Perrone O., Journal of Management and Governance, ISSN 1385-3457 Volume 20, No. 3, Springer 2016 - ISSN: 1572-963X, online publication 2015 "The SDGS in the reports of the Italian companies", research document n.16, Venturelli A., Minoja M., Perrone O. et al., (GBS), Franco Angeli, 2019, ISBN 9788891797537 "Corporate Social Responsibility and Human Rights Abuses. A comparison of the Strategies adopted by Advanced Country and BRIC Multinationals", Giuliani E, Perrone O. et al., Politeia p.34-54, v.106, 2012 - "Leading Sustainable Change, An Organizational Perspective", (Edited by Rebecca Henderson, Ranjay Gulati, and Michael Tushman), Oxford University Press,
Assessment	 Assignment: business case analysis (presentation) and the essay Midterm test: short-answer questions Final exam: it will consist of an oral exam on theoretical and practical issues concerning the course program. The students should contribute regularly and productively to class discussions and activities
Language	English

Course Title	Integrity and Ethics in Finance
Course Code	N/A
Course Type	Compulsory
Level	Master (2 nd Cycle)
Year / Semester	2 nd Year / 1 st Semester
Teacher's Name	Dr. Deimantė Vasiliauskaitė











ECTS	5	Lectures / week	4 Hours / 4 weeks	Laboratories / week	4 Hours / 4 weeks
Course Purpose and Objectives	The purpose of the course is to provide students with theoretical and practical knowledge in integrity and ethics in finance, to introduce students to ethics, related challenges to ethical behaviour, the role played by ethics in the investment profession, and the framework of the ethical decision-making process. The course has the aim to familiarize students with the CFA Institute Code of Ethics and Standards of Professional Conduct, the Global Investment Performance Standards, CFA Institute Research Objectivity Standards, and the Asset Manager Code. The course has the purpose of helping students to identify and resolve ethical conflicts.				
Learning Outcomes	 Upon successful completion of this course students should be able to: explain the concept of financial ethics and will be able to apply the knowledge in practice by using the framework of the ethical decision-making process; disclose ethical problems, identify challenges to ethical behaviour and their origins and propose ethical solutions to such problems; know the main role of the CFA Institute in financial ethics and will be familiar with the CFA Institute Code of Ethics and Standards of Professional Conduct, the Global Investment Performance Standards, CFA Institute Research Objectivity Standards, and the Asset Manager Code; will be able to apply them to situations involving issues of professional integrity and other specific situations; evaluate trade allocation practices and determine whether they comply with the CFA Institute Standards of Professional Conduct; and to identify the appropriate actions to take in response to trade allocation practices that do not adequately respect client interests. 				
Prerequisites	None	Co-re	quisites	None	
Course Content	 The course content is developed as follows: Ethics and trust in the investment profession. Code of ethics and standards of professional conduct. Understanding the code of ethics. Standards of professional conduct: professionalism, the integrity of capital markets, duties to clients, duties to employers, investment analysis, recommendations and actions, conflicts of interest, responsibilities as a CFA Institute member or CFA candidate. Introduction to the Global Investment Performance Standards (GIPS ®). Provisions of the global investment performance standards: fundamentals of compliance, input data, calculation methodology, composite construction, disclosure, presentation and reporting, real estate, private equity, wrap fee/separately managed account (SMA) portfolios. CFA Institute Research Objectivity Standards. Asset Manager Code of Professional Conduct. 				









Teaching Methodology	Face-to-Face	
Bibliography	Compulsory literature CFA Institute (2022). Code of Ethics and S https://www.cfainstitute.org/-/media/docum standards/code-of-ethics-standards-profess CFA Institute (2017). Ethics and https://www.cfainstitute.org/en/ethics-stand guidance/ethics-and-investement-industry CFA Institute (2014). Standards https://www.cfainstitute.org/-/media/docum standards/standards-practice-handbook-11t 2014.pdf CFA Institute (2020). Introduction to the Standards (GIPS). http standards/codes/gips-standards CFA Institute (2019). Ethics in practice. If Casebook. https://www.cfainstitute practice/ethics-in-practice-casebook-2nd-eet CFA Institute (2020). CFA Institute https://www.cfainstitute.org/-/media/docum standards/read-research-objectivity-standar CFA Institute (2020). Asset Manager https://www.cfainstitute.org/-/media/docum standards/read-research-objectivity-standar CFA Institute (2020). Asset Manager https://www.cfainstitute.org/-/media/docum code.ashx Recommended literature Judy Zhu (2014) The Value of https://sevenpillarsinstitute.org/value-of-fir Julia Black, Karen Anderson (2013). Crea financial services industry. https://ww	Standards of Professional Conduct. nents/code/code-ethics- ional-conduct.pdf d the Investment Industry. dards/codes/standards-of-practice- s of Practice Handbook. nents/code/code-ethics- h-ed-eff-July-2014-corr-sept- e Global Investment Performance s://www.cfainstitute.org/en/ethics- Ethics in Investment Management e.org/-/media/documents/ethics-in- dition-web.pdf Research Objectivity Standards. nents/code/other-codes- rds.ashx Code of Professional Conduct. nents/code/amc/asset-manager- f Financial Ethics, Part I. hancial-ethics/ ting an ethical framework for the ww.lse.ac.uk/law/people/academic-
Assessment	Examinations Assignments Class Participation and Attendance	60% 30% 10% 100%
Language	English	









Course Title	Behavioural Finance for Sustainable Development				
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd C	ycle)			
Year / Semester	2 nd Year / 1 st	2 nd Year / 1 st Semester			
Teacher's Name	Dr. Tom Hashimoto				
ECTS	5	Lectures / week	4 Hours / 4 weeks	Laboratories / week	4 Hours / 4 weeks
Course Purpose and Objectives	 This course is generally in line with the learning framework of CFA (chartered financial analyst) Portfolio Management (Levels 1 and 3) topic. While the materials covered in this course follow the 'readings' of CFA, additional insights from economic analysis of law, institutional economics, and personal finance provide the theoretical and practical relevance of behavioural finance with respect to financial economics in general. Paying attention to the CFA Code of Ethics and the relevant EU rules and regulations (e.g. MiFID II, SFDR), we ask how financial professionals can detect and overcome various biases not only for themselves but also for their clients. Therefore, this course is also relevant for future regulators and policymakers. Furthermore, this course is modified to address issues related to sustainable development in the sense that we also trace the evidence of behavioural errors and biases in presenting 'green' finance. Upon successful completion of this course students should be able to: illustrate how various biases influence our financial decision-making in a holistic manner; 				
	 analyse how our behavioural patterns shape financial markets (and crises) in the past decade; assess the role of professional financial advisors in overcoming various biases, especially paying attention to international ethical rules and standards (such as the CFA Code of Ethics and EU regulations). 				
Prerequisites	None	Co-re	quisites	None	
Course Content	 The course content is developed as follows: 1. Introductory discussion: Modern Portfolio Theory and Behavioural Biases. 2. Cognitive Errors and the role of institutions. 3. Emotional Biases and the role of (Social) Media. 4. Investor Personality Types and their criticisms. 				









	 5. Adviser-client relations and behavioural perspectives. 6. The rise of 'green investment': 7. Sustainable behaviours? The issues 	Portfolio Management from the case study. sue of 'green washing'.
Teaching Methodology	Face-to-Face	
Bibliography	Compulsory literature CFA Institute (2023). CFA Po <u>www.cfainstitute.org</u> (CFA available to provided during the lectures). Recommended literature Cartwright, E. (2014) Behavioural Econom Kahneman, D. (2011). Thinking, Fast and	rtfolio Management reading. members; relevant material is nics, second edition. Routledge. Slow. Penguin.
Assessment	Examinations Assignments	60% 40% 100%
Language	English	

Course Title	Technical Analysis of Financial Markets						
Course Code	N/A	N/A					
Course Type	Compulsory	Compulsory					
Level	Master (2 nd C	Master (2 nd Cycle)					
Year / Semester	2 nd Year / 1 st Semester						
Teacher's Name	Dr. Greta Keliuotytė-Staniulėnienė						
ECTS	5	Lectures / week	5 Hours / 4 weeks	Laboratories / week	3 Hours / 4 weeks		



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Course Purpose and Objectives	 The purpose of the as well as the purpose of the as well as the purpose of the a in global economic Upon successful c Define and understand application Apply diffinarkets/in make invess Purposeful issues of t abilities and 	Irpose of the course is to provide students with theoretical knowledge II as the practical skills of technical analysis of financial markets ary for the analysis and evaluation of the possible investment strategies bal economic conditions. successful completion of this course students should be able to: Define and distinguish between different tools of technical analysis, understand and discuss their purposes and controversies related to their application in financial markets; Apply different tools of technical analysis on selected financial markets/instruments, to interpret the results, and, based on them, to make investment decisions, and provide investment recommendations; Purposefully increase the theoretical and practical knowledge on the issues of technical analysis of financial markets, and to develop the abilities and skills necessary for the job.				
Prerequisites	None	Co-requisites	None			
Course Content	The course conten 1. Introduction analysis. technical fundament 2. Dow theory Challenges 3. Charting. construct of Candlestic scale. Gap patterns. 4. Market pl Interpretat moving avo 5. Overlay im and oscillo resistance stochastics 6. Trend ana Price inflo gaps, and if 7. Moving avo FAMA, etco 8. Methods of Keltner by downtrend	nt is developed as follows: ion to technical analysis. Object Classifying technical analysis tal analysis. Technical analysis tal analysis. ry. Origins of Dow theory. s and criticisms of Dow theor Mechanics and dynamics of a chart. Constant chart meas ck charts. Point-and-figure charts of action. Elements of chart per- hase analysis. Market phase tions of market phase: chart per- material divergence and momen ndicators and window oscilla dators. Overlay indicators: me levels, trendlines, channels, co s, RSI, ATR, ADX, MACD, RC ulysis. Definitions of trend. Chart cc trends. Trend directionality. verages. Components of move verages. SMA, LWMA, EM cc. of price containment. Volatt of price containment. Bands and pands, Starch bands, etc. ling and uptrending channels, co ling and uptrending channels, co ling and uptrending channels, co s containment. Colators. The contains and the containment. Colators. Contains and the containment. Bands and pands, Starch bands, etc.	ective and function of technical ysis. Main assumptions of s controversy. Technical vs Assumptions of Dow theory. y. of charting. Data needed to ures. Line charts. Bar charts. arts. Arithmetic vs logarithmic attern analysis. Popular chart e according to Dow theory. pattern, volume, open interest, atum, sentiment, etc. utors . Definition of indicators oving averages, support and hart patterns, etc. Oscillators: OC, CCI, ADL, MOM, etc. haracteristics of trend quality. hannels, trend retracements, ing averages. Application of A, VWMA, KAMA, MAMA, ility around a central value. ad envelopes. Bollinger bands, Linear regression channels, etc.			









Teaching Methodology	Face-to-Face				
Bibliography	Compulsory literature Kirkpatrick, Ch. D., Dahlquist, J. R. (Lates: Complete Resource for Financial Market Education, Incorporated. 736 p. CFA Institute (2023). CFA re- <u>https://www.cfainstitute.org/</u> (available to provided during the lectures). Scott, G.; Carr, M., Cremonie, M. (La Modern Perspectives. The CFA Institute R Recommended literature Grimes, A. H. (Latest Edition). The Art at Market Structure, Price Action, and Tradin & Sons, Inc. New Jersey (USA). 480 p. Special issue "Technical analysis of finan- Financial management, 2023. M <u>https://www.mdpi.com/journal/jrfm/specia</u> Aronson, D. (Latest Edition). Evidence-Ba the Scientific Method and Statistical Infere Sons, Inc. New Jersey (USA). 544 p.	t Edition). Technical Analysis: The Technicians. 3 rd edition; Pearson eadings: Technical analysis. 5 members; relevant material is test Edition).Technical Analysis: esearch Foundation. 45 p. nd Science of Technical Analysis: ng Strategies. 3rd edition. J. Wiley cial markets". Journal of Risk and MDPI (Basel, Switzerland); <u>1 issues/Technical Analysis</u> ased Technical Analysis: Applying nce to Trading Signals. J. Wiley &			
Assessment	Examinations Assignments	60% 40% 100%			
Language	English				

Course Title	Investing for Environmental and Social Impact				
Course Code	N/A	N/A			
Course Type	Compulsory	Compulsory			
Level	Master (2 nd C	Master (2 nd Cycle)			
Year / Semester	2 nd Year / 1 st Semester				
Teacher's Name	Prof. Dr. Jelena Stankevičienė				
ECTS	5	5 Lectures / week 5 Hours / 4 Laboratories / 3 Hours / 4 weeks			









Course Purpose and Objectives	The purpose of the course is to provide the theoretical knowledge and practical skills necessary the better understanding how investment mechanisms can be structured to solve critical social and environmental challenges and be well-positioned to work in the expanding impact investing industry.				
Learning Outcomes	 Upon successful completion of this course students should be able to: properly apply key the concepts, frameworks and models to source, analyse and fund impact investments across asset classes and impact themes and lenses; apply the theoretical basis for impact investing, e.g., externalities, systems analysis, market failures, shared value and blended value investing; analyse the effectiveness of impact investing tools and structures available to impact investors; map impact investing opportunities against existing product offerings and explore the gaps; understand the segmentation and distinct roles of specific impact investors: institutional (pension funds, foundations and endowments), corporations, public sector (multi-laterals, federal, state, local), high 				
Prerequisites	None	Co-requisites	None		
Course Content	 The course content is development investing 1. Introduction and case for impact impact investing 2. Market participachain. Sharehold 3. Socially response screening, the field 4. Investment goal theory of change 5. Impact theme: development fin fossil fuel divest 6. Impact tools: is standards and refield 7. Impact Measure 8. Structuring impainnovative tools 9. Due diligence production in Greentech, inframe 	oped as follows: d Overview: definition investing. History, si g, ESG, sustainability ants and stakeholder der activism: positive hsible investing: ne duciary standard revis ls defining impact, th e and portfolio constru- environmental fina- tance and access to fina- tment. integrating ESG inte- porting. ment and Managemer act investments, ventu- and structures to driv process and impact in a impact investing structure.	ns, classical finance and the ze and characteristics of the marketplace. s across the impact capital and negative investment. gative screening, positive sited. heories of change. Bridging action. ance, ecosystem services, hancial services, climate risk, o the investment process, nt. re capital and private equity, e impact hvestment advisor selection. , environmental finance,		
Teaching Methodology	Face-to-Face				









Bibliography	Compulsory literature Briaud, P. Impact investing handbook practitioners. Rockefeller Philanthropy Ad Cole, S., Gandhi, V., Brumme, C.R. and Introduction to investing for impact. Harva Global Impact Investing Network. Core C <u>https://thegiin.org/characteristics/</u> Cohen, R. Impact: Reshaping capitalism to Bodie Z., Kane A., Marcus A. J. Esse Hill/Irwin. Recommended literature European Commission (EC) Directorate- policy (Latest Edition). Guide to Cost-Bene Economic appraisal tool for C <u>https://ec.europa.eu/inea/sites/inea/files/cbs</u> Pearce D., Atkinson G., Mourato S. (Late and the Environment Recent Dev <u>https://dx.doi.org/10.1787/97892640100555</u> Larson, E. W.; Gray Cl. F. (Latest Edi Managerial Process. Fifth ed. McGraw-Hill Brigham E.F., Houston J. (Latest Edit Management. Cengage Learning. Social Impact Investment on <u>https://socialimpactinvestment.org/</u>	: An implementation guide for visors. d Harmani, M. Background note: and Business School. Tharacteristics of Impact Investing. drive real change. Random House. entials of investments. McGraw- General for Regional and Urban efit Analysis of Investment Projects Cohesion Policy 2014-2020. a guide cohesion policy.pdf est Edition). Cost-Benefit Analysis relopments. OECD Publishing i-en ition). Project management. The l. ion). Fundamentals of Financial nline education platform.
Assessment	Examinations Self-control exercises	90% 10% 100%
Language	English	









Course Title	Financial Technologies and Alternative Investments					
Course Code	N/A	N/A				
Course Type	Compulsory					
Level	Master (2 nd C	ycle)				
Year / Semester	2 nd Year / 1 st	Semester				
Teacher's Name	Prof. Dr. Alfr	eda Šapkausk	tienė			
ECTS	5	Lectures / w	eek	5 Hours / 4 weeks	Laboratories / week	3 Hours / 4 weeks
Course Purpose and Objectives	The purpose knowledge o strategies to regulations in management,	of the cour n financial te tackle the d the industry; payments, cr	se is echnolo lisrupti- change yptocu	to acquire b ogies, includi on driven by s in multiple or rrencies, and t	oth theoretical ar ng frameworks fo rapid innovatio lomains such as ba rading.	nd practical or effective n and new anking, asset
Learning Outcomes	 Upon successful completion of this course students should be able to: understand and properly evaluate the most important trends in financial technology; acquire the ability to independently analyze financial technology risks; acquire the ability to independently assess trends and issues in the context of financial technologies; acquire the ability to comment on the possible impact of the dynamics of financial technologies on the results of business financial activities and overall economic growth; to independently search for information on financial technology risk management issues and will be able to analyze the received information; to propose solutions for the application of financial technologies in the financial sector and discuss their advantages and disadvantages. 					
Prerequisites	None Co-requisites None					
Course Content	 The course content is developed as follows: 1. Introductory lecture: course presentation. Introduction to Financial Technology. An introduction to the current fintech ecosystem: near-term opportunities and long-term trends in fintech innovation. 2. Tools for innovation: the problem of choosing the right tools. 3. The Future of Money: Uncovering the Future of Money and Analysing the Macroeconomic Factors Affecting Financial Innovation and Alternative Investments. 					









	 The future of financial markets: analysis of the impact of financial innovations on markets and assessment of business strategy. The future of market infrastructure: the added value of financial innovation or the disruption of the system. Infrastructure and regulatory technologies: the relationship between infrastructure, the regulatory environment and financial technology innovation. Real estate technologies and innovations: opportunities and perspectives. Fintech Frontiers: Reflections on Future Technologies and the Future of Financial Services.
Teaching Methodology	Face-to-Face
Bibliography	Compulsory literature Pentland, A., Rabbe, L., Tufano P. (2019). "Oxford Fintech programme" material. University of Oxford. Financial Times (The newest information). <u>http://www.ft.com</u> Bank of Lithuania (The newest information). Publications of the Bank of Lithuania and other information. <u>http://www.lb.lt</u> Recommended literature Lee, D. K. C., Low, L. Inclusive Fintech: Blockchain, Cryptocurrency and ICO. Chishti, S., Puschmann, T. The Wealthtech Book: The Fintech Handbook for Investors, Entrepreneurs and Finance Visionaries. Bloomberg News (The newest information). <u>https://www.bloomberg.com</u> The International Monetary Fund (The newest information). <u>http://www.imf.org</u> The European Central Bank (The newest information). <u>https://www.ecb.europa.eu/home/html/index.en.html</u>
Assessment	Examinations60%Assignents40%100%
Language	English











Course Title	Equity Securities					
Course Code	N/A	N/A				
Course Type	Elective					
Level	Master (2 nd Cy	vcle)				
Year / Semester	2 nd Year / 1 st S	emester				
Teacher's Name	Prof. Dr. Rasa	Kanapickien	ė			
ECTS	5	Lectures / we	ek	5 Hours / 4 weeks	Laboratories / week	3 Hours / 4 weeks
Course Purpose and Objectives	The purpose o allowing the appropriate va expected return	f this course student to aluation conc n of equities i	is to a analys epts a n the g	cquire theore e and evalu and technique global context	tical and practical nate equity secun es and to estimate.	knowledge rities using te risk and
Learning Outcomes	 Upon successful completion of this course students should be able to: understand the significance of investment, its logic, consistency, and opportunities; the ability to assess the effectiveness of various types of equity securities; analyse and assess the risk of various types of equity securities; apply mathematical methods to the assessment of investment alternatives, to draw conclusions, and to take justified investment decisions; analyse an investment problem and provide potential ways of its solution. 					
Prerequisites	None		Co-re	quisites	None	
Course Content	The course con 1. Equity and va valuation 2. Return and exp estimate return. weighte cash floon 3. Indust Income analysi prices a Technologiaa	ntent is develoe Valuation: Iluation appli- on results. n concepts. R pected (holdin tes from intrin The equity ri- ed average co ows. ry and Comp e statement, E is and sensitiv and costs. Sale ological develo	oped as Appli cations eturn g perio sic val isk pre st of c bany A Balance ity ana es and elopme	s follows: cations and s. The valuat concepts: Ho od) return; Re lue estimates; emium. The r apital. Discou analysis. Fina e sheet and C alysis. The im cost projectio ents. Long-te	Processes. Value tion process. Com olding period return quired return; Exp Discount rate; Inte equired return on ant rate selection in ncial modelling: N Cash flow statement pact of competitive ns with inflation ar erm forecasting.	definitions municating m; Realized ected return ernal rate of equity. The n relation to Modelling of nt; Scenario e factors on nd deflation. Building a









model: Industry overview; Company overview; Construction of pro forma Income statement, Cash flow statement and Balance sheet; Valuation inputs.

- 4. **Discounted Dividend Valuation.** Present value models. The dividend discount model. The Gordon growth model. Multistage dividend discount models: Two-stage dividend discount model; Valuing a non-dividend paying company; The H-model; Three-stage dividend discount models; Spreadsheet (general) modelling; Estimating a required return using any DDM. The financial determinants of growth rates: Sustainable growth rate; Dividend growth rate, retention rate, and ROE analysis; Financial models and dividends.
- 5. Free Cash Flow Valuation. FCFF and FCFE Valuation Approaches: Present Value of Free Cash Flow; Single-Stage (Constant-Growth) FCFF and FCFE Models. Forecasting Free Cash Flow. Free Cash Flow Model Variations: An International Application of the Single-Stage Model; Sensitivity Analysis of FCFF and FCFE Valuations; Two-Stage Free Cash Flow Models; Three-Stage Growth Models. Nonoperating Assets and Firm Value.
- 6. **Market-Based Valuation: Price and Enterprise Value Multiples.** Price and enterprise value multiples in valuation. Price multiples. Enterprise value multiples. International considerations when using multiples. Momentum valuation indicators.
- 7. **Residual Income Valuation.** Residual income: The use of residual income in equity valuation; Commercial implementations. The residual income model: The general residual income model; Fundamental determinants of residual income; Single-stage residual income valuation; Multistage residual income valuation. Residual income valuation in relation to other approaches. Accounting and international considerations.
- 8. **Private Company Valuation.** The scope of private company valuation. Definitions (standards) of value. Private company valuation approaches: Earnings normalization and cash flow estimation issues; Income approach methods of private company valuation; Market approach methods of private company valuation; Assetbased approach to private company valuation; Valuation discounts and premiums; Business valuation standards and practices.

Teaching Methodology	Face-to-Face
Bibliography	Compulsory literature CFA Institute (2017). Equity. CFA Program Curriculum. Volume 4. Level 2. Pearson Publishing. Damodaran, Aswath Investment Valuation: Tools and Techniques for Determining the Value of Any. Hoboken [N.Y.]: J. Wiley Recommended literature











	Bodie, Zvi; Kane, Alex; Marcus, Lan. Essentials of Investments. New York [N.Y.]: McGraw- Hill. Research Articles from Journal of Finance, Financial Markets, Institutions and Instruments, Journal of Business, Journal of Money, Credit and Banking, Oxford Economic Papers, Finance and Development, The Economist		
Assessment	Classroom work Project Examinations	20% 30% 50% 100%	
Language	English		

Course Title	Investment P	ortfolio Analysis			
Course Code	N/A				
Course Type	Elective				
Level	Master (2 nd Cycle)				
Year / Semester	2 nd Year / 1 st	Semester			
Teacher's Name	Assoc. Prof	Assoc. Prof. Antanas Laurinavičius			
ECTS	5	Lectures / week	5 Hours / 4 weeks	Laboratories / week	3 Hours / 4 weeks
Course Purpose and Objectives	The purpose knowledge of market mode evaluation m portfolio, man and risk of se approaches, a	of this course is on investment portfo- ils and advanced por- ethods. Such issues naging portfolio for d elected portfolio, as are spanned by the co	s course is to acquire both theoretical and practical stment portfolio analysis, including portfolio theory, advanced portfolio management, portfolio performance Such issues as integrating various types of assets in a portfolio for different types of investors, estimating return portfolio, as well as using a number of asset allocation ned by the course material.		











Learning Outcomes	Upon s	successful completio apply the principal as well as the finance analyse the risk of investment; perform asset select horizon and prefere calculate return and apply main market of apply some chosen list and comment management process list, comment on as some chosen model conduct scientific re- to present the obtain	n of this course studer models of the building cial theories, and finan an investment portfoli ion and construct a por nce structure of an inv estimate expected ret equilibrium models in portfolio-performance on main elements s for an individual and set allocation strategie cases; esearch by working in ned results to the audie	its should be able to: g of an investment portfolio, icial behaviour; io when taking decisions on rtfolio suiting the investment vestor; urn and risk of a portfolio; portfolio management; e evaluation methods; s and stages of portfolio d institutional investor; es, as well as propose one in dependently or in group and ence.
Prerequisites	None		Co-requisites	None
Course Content	The co 1. 2. 3. 4.	Portfolio and ris approach to investi defined benefit pen- process. Mutual fu management. Finan measuring and mod Portfolio risk and major asset class correlation) of ass deviation. The effect less than perfectly frontiers of risky as The selection of an of aversion) and the ca Market Equilibriu free asset with a p (CML). Systematic (including the mark (CAPM). Arbitrage ratio, M2, and Jense Basics of portfolio written investment an IPS. Risk and ret a client. The willing tolerance. The inve concerns, legal and specification of as	loped as follows: a management- an ng. Types of investor sion plans. The steps is nds and other pooled cial and non-financial ifying risk exposures. return. Return measures es. The mean, vari- set returns. Risk av- et on a portfolio's risk of correlated. The mini- ssets and the global mo- optimal portfolio, given apital allocation line. Im Models. The impli- portfolio of risky asse- and non-systematic risk- tet model). Beta. The pricing theory (APT) en's alpha, tracking erro- planning and conse- policy statement (IPS urn objectives and how gness and the ability (estment constraints of regulatory factors, and set classes in relation	overview. The portfolio is. Defined contribution and in the portfolio management l investment products. Risk sources of risk. Methods for sures. Characteristics of the ance, and covariance (or version. Portfolio standard of investing in assets that are mum-variance and efficient ninimum-variance portfolio. n an investor's utility (or risk cations of combining a risk- ets, the capital market line sk. Return generating models capital asset pricing model). The Sharpe ratio, Treynor for and the information ratio. truction. The reasons for a). The major components of w they may be developed for capacity) to take risk in risk liquidity, time horizon, tax d unique circumstances. The on to asset allocation. The









	 principles of portfolio construction relation to the IPS. 5. Measuring and managing mark measuring portfolio risk. The p historical simulation, and Monte estimating VaR. Advantages and I VaR. Evaluation of quantile-based relation. 	and the role of asset allocation in tet risk. Value at risk (VaR) in parametric (variance–covariance), c Carlo simulation methods for imitations of VaR. Extensions of risk measures.
Teaching Methodology	Face-to-Face	
Bibliography Assessment	Compulsory literature CFA Institute (2023). Reading "Portfolio https://www.cfainstitute.org/ (available t provided during the lectures). Maginn, J. L., Tuttle, D. L., McLeavey Investment Portfolios. A Dynamic Process. Jersey). Pickford, J. Mastering Investment. Prentice Hull, J. C. Risk Management and Financi Finance. Reilly F.K., Brown K.C. Investment Ana South-Western - Thomson Learning. Recommended literature Pompian, M. M. (Latest Edition). B Management. Wiley: New Jersey. Jones, Ch. P. (Latest Edition). Investments Edition. John Wiley & Sons, Inc. Jordan, Bradford D., Miller Jr., Thomas Edition). Fundamentals of Investments: Edition. McGraw-Hill Education. Elton E. J., Gruber M. J., Brown S. J., G- Modern Portfolio Theory and Investment Jersey). Examinations	Management" (Levels II and III). to members; relevant material is 7, D. W., Pinto, J. E. Managing 3 rd Edition. Wiley Hoboken (New e Hall Financial Time. al Institutions. 4th Edition. Wiley alysis and Portfolio Management. ehavioral Finance and Wealth s: Analysis and Management. 12th s W., Dolvin, Steven D. (Latest Valuation and Management. 7th oetzmann W. N. (Latest Edition). Analysis. Wiley Hoboken (New
	Assigment	25% 100%
Language	English	











Course Title	Master Diplo	ma ThesIs			
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd C	Cycle)			
Year / Semester	2 nd Year / 4 th	Semester			
Teacher's Name	TBA				
ECTS	30	Lectures / week	Up to 5 sessions	Laboratories / week	None
Course Purpose and Objectives	The course's Master's The subdiscipline identify and the store of the	the course's purpose is to provide guidance on how to write a successful aster's Thesis. It aims to provide skills in research methods in the bdiscipline of Finance. Students will be able to demonstrate the ability to entify and formulate issues critically, independently and creatively as well to plan and use appropriate methods, undertake advanced tasks within edetermined timeframes, and to contribute to the formation of knowledge in e field. Other skills will be related to participation in research and evelopment work in the field of data analytics and sustainable finance, which considered the main part of the thesis. The course also aims to equip the udent with the tools required to manage a project as large as a Master's nesis, through providing project management techniques. The Master's nesis course includes research methods stages of reviewing related work, attending existing or developing new ideas, software implementation and sting, analysis and evaluation, and finally writing a Master's Thesis. Finally, aims to prepare the student for independent work as a recipient of a Master's perce.			
Learning Outcomes	Upon success Be aw scient Comm argum Intelli Data e statist Select carry Sustai Identi Intelli realist	sful completion of thi vare of their responsil ific ethics, and data a nunicate research nent orally and in wri gence. exploration and statis ical tools and probab t and justify a research out a literature search inable finance. fy real-world prob gence to which ac tically applied to imp	s course stud bilities as reso and code man results, inclu- ting in the su tical analysis ility calculati h topic and u n and review lems in the cademic con rove or resolv	ents should be able earch students, incl agement requireme uding building a bdiscipline of Artif of data with the us ons. se various resource in the subdiscipline e subdiscipline of acepts and metho we the problem situ	e to: luding ents. a scientific ficial se of es to e of f Artificial ds can be nation.









	• Select and use effect particular cases in the and manage their ways and ways a	ctively the methods an he subdiscipline of Art ork.	d techniques appropriate for tificial Intelligence, and plan
Prerequisites	The student needs to have completed all core courses of the programme.	Co-requisites	None
Course Content	The investigation will invol- evaluation of the literature management practice and students to develop and a evaluate the appropriateness A major aim of the thesis is autonomously with respect implementation of an ac Project/Dissertation is desig be expected to demonstrate capabilities and processes application of theory toward Students will be expected to and understanding: Use and exploitation Use of relevant com Development of ap stakeholder needs Critical thinking and Problem solving and Scanning and organ sources Use of quantitative Communication in a Personal effectivene practice and experie Effective performan working with and ap Ability to conduct practice The thesis report will requis to 20,000 words excluding review, description and eval the research, an option app considering the implication	olve a thorough literat and development of a further research activ apply appropriate rese is and effectiveness of to encourage students to the planning, orga dvanced project at gned to be integrative advanced understandin s, the strategic exter d the advancement of o draw on the followin n of information and e munication technique propriate business pol d creativity d decision making nizing data and abstra data a range of media ess and interpersonal s ence to e with clients and tea pplying ethical and organ t research and deve in students to produce g appendices. The rep luation of the research oraisal and full conclu-	ure review together with an conclusions of the status for rity. The thesis will require earch methodologies and to the research process. Is to work collaboratively and anization and in some cases a professional level. The and strategic. Students will ng of organizations, markets, mal context and a critical management practice. Ing sources skills, knowledge evaluation of options and strategies to meet states and strategies to meet cting meaning from diverse skills including reflection on ams ganizational values lop workable management e a report of between 15,000 port will contain a literature methodology, findings from sions and recommendations t importantly a management









	report section detailing the main findings analysis.	from the organizational/sectional
Teaching Methodology	Face-to-Face	
Bibliography	There is no text for the course but students will be provided by the instructor.	will be using a thesis manual, which
Assessment	Written Thesis Presentation	70% 30% 100%
Language	English	· · · · · · · · · · · · · · · · · · ·









Appendix 5 Students' Handbook





Joint MSc. in Financial Data Analytics and Sustainable Finance





FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE

UNLOCK YOUR FINANCIAL DATA ANALYSIS CAREER:

JOINT MASTER'S DEGREE PROGRAMME FINDATA AT 4 EUROPEAN UNIVERSITIES

A multidisciplinary two-year joint master's degree programme linking finance and data analysis with emphasis on environmental, social, and governance considerations.

Two specialisations: Corporate Finance and Financial Markets.



This manual contains relevant information for students interested in the Joint MSc Financial Data Analytics and Sustainable Finance program. Any questions, concerns, or comments regarding the information presented in this manual or about the program can be directed to the study coordinator, Ms. Barbora Pašková, at Phone: +420 466 036 058 or Email: findata@upce.cz. You can also visit our website at https://www.emfindata.eu/ for more details.

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1. INTRODUCTION TO THE PROGRAMME

I. **PROGRAMME OVERVIEW**

Financial Data Analytics and Sustainable Finance is a Joint Degree follow-up Master's program organized in cooperation between four partner universities: University of Pardubice, Czech Republic; European University, Cyprus; LUMSA University, Italy and Vilnius University, Lithuania. The objective of the study program is to provide the graduates with systematic knowledge not only of finance but also of advanced technological applications so that they will be prepared to face the challenges associated with constant developments in financial technology.

II. <u>AIMS AND OBJECTIVES</u>

The aim of the master's study program, Financial Data Analytics and Sustainable Finance, is to educate highly qualified experts in the field of finance and data analytics. These graduates will be equipped with knowledge of key financial and economic disciplines, with an emphasis on environmental, social, and governance (ESG) considerations. Moreover, to meet the demands of the ever-evolving business environment in sustainable finance, graduates must possess technological skills and knowledge. In today's digitized world, data analysis plays a crucial role in processing vast amounts of data to extract useful information, supporting informed decision-making. This study program offers graduates a synergistic blend of economic and financial knowledge and skills, with a strong focus on sustainability and the application of data analysis. The objective of this study program is to provide graduates with systematic knowledge not only in finance but also in advanced technological applications. This prepares them to tackle the challenges associated with ongoing developments in financial technology.

Applicants can hold a bachelor's degree in either economics or a technical discipline. By selecting an appropriate elective course, students can supplement their knowledge from their undergraduate degree in economics or data analysis.










The study program recognizes the diversity of employment opportunities in the finance field, which require a broad overview of the industry. However, it also emphasizes a deeper understanding of specific finance areas. As a result, the study program allows students to choose one of two specializations:

> 1. Corporate Finance: The goal of this specialization is to provide a cuttingedge understanding of modern corporate finance. It also offers in-depth insights into sustainable corporate finance by raising awareness of the social and environmental impacts and the importance of digital transformation in financial decision-making for long-term financial benefits.

> 2. Financial Markets: The aim of this specialization is to prepare highly qualified finance specialists with a strong grasp of finance and financial markets for sustainable development. These specialists are trained to address contemporary financial and economic challenges, working towards a long-term paradigm for sustainable investments.

III. **CONSORTORIUM UNIVERSITIES**

- 1. University of Pardubice, Czech Republic
- 2. European University Cyprus, Cyprus
- 3. LUMSA University, Italy
- 4. Vilnius University, Lithuania













IV. **<u>REQUIREMENTS</u>**

PROGRAMME REQUIREMENTS	ECTS		
One hundred twenty (120) ECTS credits are required to obtain a Master's degree in Financial Data Analytics and Sustainable Finance. They are distributed as follows:			
Compulsory courses (the exact number of ECTS is depending on the students' choice between LUMSA or Vilnius).	70 - 71		
Elective courses (the exact number of ECTS is depending on the students' choice between LUMSA or Vilnius).	19 - 20		
Postgraduate assignment	30		
Total Requirements	120		











FINDATA FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE 2. PROGRAMME STRUCTURE

I. <u>DURATION – SEMESTER BREAKDOWN</u>

The FINDATA programme is designed to make the best use of the specific expertise available at each Partner University. It shall enable each student to profit from the best education and supporting services each Partner offers, and to enable each student to gain experience in different international environments.

The study field is economics/finance completed by informatics. The FINDATA programme comprises 120 ECTS credits, which correspond to a period of study of 4 semesters or 2 years. The study form of the FINDATA programme is full time. The students are obliged to study at least in three of the Partner universities.

Two specialisations are offered to the students to choose within the FINDATA programme – Corporate Finance, and Financial Markets. Each student chooses his specialisation according to his/her preference and also to the capacities of the partner universities. Both of them are equal and lead to the joint diploma provided together by the four Partner universities. Approximately one half of students is expected to study each specialisation.

Student and staff mobilities are integral parts of the FINDATA programme. Each student must spend a semester at least with three out of the four Partner universities.







MODULES

LIST OF COURSES

Structure of the Programme of Study:



1 st Semester University of Pardubice	ECTS
Economics and Financial Aspects of Innovation and Sustainability	5
Principles of Artificial Intelligence and Machine Learning	5
Applied Financial Econometrics	5
EU Law and European Values	5
Research Methods	5











1 st Semester University of Pardubice			
Electives (one out of two):			
Principles of programming for R	5		
International Finance and Macroeconomics	5		
2 nd semester European University Cyprus	ECTS		
Computational Finance	10		
Big Data Analytics in Finance	10		
Electives (one out of two):			
Machine Learning in Finance	10		
Programming for Python	10		
Summer school in Cyprus – June, after the exam period The aim is to introduce the students with diploma thesis topics and choices available at each university. One representative from each university should participate.			
3 rd Semester Choice between LUMSA or Vilnius	ECTS		
a) LUMSA (specialisation Corporate Finance)			











3 rd Semester Choice between LUMSA or Vilnius	ECTS
Innovation in Banking and FINTECH	6
Sustainable Finance and Investments	6
Advanced Corporate Finance	8
Ethics and Humanism in Digital Era	6
Electives (one out of two):	
Financial Risk Management	4
Corporate Strategy and Sustainability	4
	ECTS
b) Vilnius University (specialisation Financial Markets)	ECTS
b) Vilnius University (specialisation Financial Markets) Integrity and Ethics in Finance	ECTS 5
b) Vilnius University (specialisation Financial Markets) Integrity and Ethics in Finance Behavioural Finance for Sustainable Development	ECTS 5 5
b) Vilnius University (specialisation Financial Markets) Integrity and Ethics in Finance Behavioural Finance for Sustainable Development Technical Analysis of Financial Markets	ECTS 5 5 5











	ECTS
Financial Technologies and Alternative Investments	5
Electives (one out of two):	
Equity Securities	5
Investment Portfolio Analysis	5
4 th Semester	ECTS
In any University Master diploma theses	30

*Students will be present in the campus of the selected university during the whole semester.

**For more details and course descriptions, please refer to the annexes.











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EXAMINATION – THESIS III.

The FINDATA study programme is based on principles of the EU common higher education area, therefore, students' learning outcomes in the Partner University are acknowledged automatically. The learning outcomes of the students of the FINDATA study programme are accounted according to the requirements of the European Credit Transfer System (ECTS).

The Partner Universities undertake to recognize the successful completion of the study obligations and the assessment of students and obtained degrees within the scope of the FINDATA Study Programme under this Agreement without further examination of equivalency.









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Each Partner University releases and grants each student, studying in that particular Partner University, a Transcript of Records indicating his/her academic performances and number of credits obtained at the Partner University. The Partner Universities undertake to recognise learning outcomes as confirmed in this Transcript of Records from other Partner Universities.

The local grading system is used for the assessment of the workload achieved by the students. Partner Universities agree on the evaluation adjustment.

The re-taking of examinations, repetition of study subjects, order for re-examination of appeals concerning assessment of outcomes, order of dealing with appeals are regulated by legal documents of the Partner University where the student has been enrolled for studying. If a conflict, violation of academic ethics, procedural actions arise, appropriate structures of a university, where the student has been studying when such situation occurred, perform following the set functions, if needed, collaborating with structures of all Partner Universities.

The final assessment of the student competence providing joint master's degree is evaluation of the Master's Thesis and its public defence. Whereas at the University of Pardubice, defence of Master's Thesis is integrated into the final leaving exam, all students of the programme will be defending their Master Thesis and the academics from University of Pardubice, who are participating in the Examination Committee, will ask theoretical questions which have to be answered by the student to pass the final leaving exam and obtain the joint diploma.

After the second semester, the students choose the research advisor to supervise their Master's Thesis, adjust with him/her the topic of Master's Thesis which is approved before the third semester.

Master's Thesis is assessed by Examination Committee of the university the student has chosen for the Master Thesis supervision. If the right of appeal against assessment of Master's Thesis is granted by the individual Partner University where the student has been supervised, then it shall be processed according to the order of appeals concerning graduation theses approved at the respective Partner University.

IV. DIPLOMA

The graduates of the FINDATA study programme shall receive a joint diploma signed by all the Partner Universities representatives certifying the programme completion, which form is to be in accordance with the laws of all the states where the Partner Universities are based. The award ceremony will take place at the Coordinator and representatives of all other Partner University may attend it. Details of the diploma layout and its template will be agreed separately.

The European standard assessment scheme will be used and adjusted evaluation presented in the supplement of the diploma according to the confirmed adjustment of study outcome evaluation (see Table 1). All studied subjects are described in the supplement as well as their credits, classroom hours, evaluation and the average score.











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Joint diploma is issued when a student passes successfully all the study subjects of the FINDATA study programme and (a) defends his/her Master's Thesis and (b) according to the laws of the Czech Republic passes the state final exam, which covers the defence of Master's Thesis and assessment of selected theoretical courses knowledge, which will be verified/tested by the scholar representing University of Pardubice in the Examination Committee during the Master's Thesis defence.



V. **COURSE ASSESSMENT RULES**

The programme is comprised of 15 modules, which are allocated a certain credit value based on notional student workload, and are assigned to Master's credit level based on their academic content and objectives. Every course/module is summatively assessed in order to obtain an indication of a student's success in meeting the assessment criteria used to gauge the intended learning objectives of the module.

VI. LANGUAGE OF ASSESSMENT

The language of assessment for all programme components is English.









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VII. JOINT MANAGEMENT COMMITTEE

The FINDATA Programme is administrated by the Joint Management Steering Committee and Board of Directors. They are supported by the Admission Committee, Scholarship Selection Committee and Examination Committees.

The Board of Directors consists of four members:

Dr Alexios Kythreotis - European University Cyprus •Assistant Professor, Financial Accounting •The School of Business Administration •Department of Accounting, Economics and Finance
 Dr. Jana Janderová - University of Pardubice Assistant Professor, Public Law Faculty of Economics and Administration Institute of Administrative and Social Sciences
 Prof. Claudio Giannotti - LUMSA Professor, Economics of Financial Intermediaries Department of Jurisprudence, Economics, Politics and Modern Languages
 Dr. Roma Adomaitiené - Vilnius University Associate Professor, Quality Management Faculty of Economics and Business Administration









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FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE

Dr. Alexios Kythreotis

Dr. Alexis Kythreotis is an Assistant Professor in Accounting and Finance at European University Cyprus. He holds a PhD in Financial Accounting from Athens University of Economics and Business and an MBA from Cardiff University. Additionally, he holds the European Certificate in E-learning Courses Design and Teaching from UOC, Universitat Oberta de Catalunya. His research primarily focuses on Financial Accounting, Financial Fraud, Market-Based Accounting Research, and the Quality of Financial Statements. Alexios was the Chairperson of Accounting, Economics and Finance Department at European University Cyprus from 2017 to 2022 and the Coordinator of the BSc in Accounting form 2015 until 2023.

JUDr. Jana Janderová, Ph.D.

Jana is assistant professor (since 2012) and vice-dean for external affairs and development (since 2020) at the Faculty of Economics and Administration, University of Pardubice (UPCE). She holds a PhD in Private Law from Charles University, Prague, the Czech Republic (2008), and a MSc in Law and Legal Science (2002). Prior to UPCE, Jana had worked as company secretary in one of the International Power, plc. holding companies responsible for legal affairs in Central and East Europe. Jana's main research fields are mainly Administrative and EU Law, where she concentrates mainly on the common values of good governance and human rights protection. Her research outcomes have been presented in various scientific conferences and international journals.

Prof. Claudio Giannotti

Director of the Department of Law, Economics, Politics and Modern Languages of LUMSA in Rome. Full Professor of Economics of Financial Intermediaries at the Department of Law, Economics, Politics and Modern Languages of the LUMSA University. Founding member of the Center for Relationship Banking and Economics (CERBE), research unit of LUMSA in Rome. Member of the Academic Board of the PhD in Civil Economy Sciences. Governence, Institutions and History of the LUMSA University. Member of the Board of the European Real Estate Society (ERES), which includes academics, operators and PhD students with the main objective of promoting and developing research in real estate economics and finance in Europe (from 2012 to today). Senior Collaborator of the Financial Intermediation and Insurance Area of the SDA Bocconi of Milan. PhD in Banking and Finance, X Cycle of the Doctorate, with administrative headquarter at the University of Rome Tor Vergata (2000). Vice Rector with responsibility for research activity at the LUM University (from 2012 to 2014). Member of the Academic Board of the Research Doctorate in Banking and Finance at the University of Rome Tor Vergata (from 2006 to 2013). Member of the Academic Board of the International Research Doctorate in "The Economics and Management of Natural Resources" promoted by the LUM University, in collaboration with the Megatrend University of Belgrade (Serbia), the China Three Gorges University (China), the Louisiana Tech University (USA) and the Saint Petersburg State Forest Technical University (Russia) (until July 2015). Director of the Management School of the LUM Jean Monnet University of Casamassima (Bari), from 2011 to January 2012. Educational auditor ASFOR (Italian Association for Management Training) for the verification of the requirements for the accreditation of the Masters (from 2005 to 2007). Member of the ICT Commission of ASFOR (Italian Association for Management Training) on the accreditation criteria, the glossary and the quality requirements of the e-Learning Masters (from 2000 to 2006). The research activity has mainly developed along the following lines: real estate credit; real estate investments and funds; the relationship between banks and companies; credit securitization; commercial credit; the Fintech; financial education.









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Dr. Roma Adomaitiene

R. Adomaitiene holds PhD in Management from Vilnius University, Lithuania. She has more than 25 years of experience in teaching, and now she is an associate professor at the Faculty of Economics and Business Administration (FEBA), Vilnius University. At the same faculty, she has been employed as vice-dean for studies since 2017. As an expert, R. Adomaitiene participated in a few EU-funded projects; she consulted public sector organizations and was an assessor of the national quality prize. In 2021-2022, R. Adomaitiene was a member of the Council of the Lithuanian Association for Quality Management and Innovation. R. Adomaitiene initiated and coordinated FEBA's accreditation according to CEEMAN international quality requirements, and now is preparing for AACSB accreditation.

VIII. ACADEMIC STAFF

UNIVERSITY OF PARDUBICE



Prof. Liběna Černohorská, Ph.D



Jana Janderová, Ph.D



Solomon Gyamfi, Ph.D



Prof. Hana Kopáčková, Ph.D.



prof. Petr Hájek, Ph.D.



Prof. Viktor Prokop, Ph.D.



Jana Heckenbergerová Ph D



prof. Ing. Jan Stejskal, Ph.D.

LUMSA UNIVERSITY



Stefano Bonini, M.A. PhD



prof. Lucia Gibilaro. Ph.D.



prof. Giovanni Ferri, Ph.D.



prof. Laura Palazzani Ph.D.



Carolina Gianardi



Oriana Perrone, MSc. Ph.D.



prof. Claudio Giannotti,



Ph.D.



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B.Sc. Alexios Kythreotis, MBA, Ph.D



B.A. Simona Mihai-Yiannaki, MBA, Ph.D.



prof. Klea Panayidou, Ph.D.



BSc, MSc, Andreas Papayiannis, Ph.D.

VILNIUS UNIVERSITY



Lect. Rosvaldas Krušna



Prof. Dr., Alfreda Šapkauskienė



Assoc. Prof., Dr. Tom Hashimoto



Prof., Dr. Rasa Kanapickienė



Assoc. Prof., Dr. Greta Keliuotytė-Staniulėnienė



Assoc. Prof., Dr. Antanas Laurinavičius



Prof. Dr., Jelena Stankevičienė













I. ADMISSIONS

Admission procedure is administered by the Coordinator with the support of all Partner Universities. Applications to the FINDATA Study Programme shall be submitted via online platform run by the Coordinator before the end of the application deadline.

The selection of successful applicants will be organized by all Partner Universities together (the Consortium). The detailed admission criteria will be stipulated by the Board of Directors in cooperation with all Partner Universities. Unless there is a change, the criteria used for the previous year shall apply.

To be eligible for admission to the FINDATA study programme, students must have graduated from a bachelor degree study programme, demonstrate English language proficiency and meet the other admission criteria agreed to by the Parties. Students who have not yet finished bachelor degree may be eligible for admission to the FINDATA study programme through the selection process, under the conditions that they obtain this bachelor degree before enrolling in the FINDATA Study Programme.

To enter the FINDATA Study Programme, candidate must have at least academic Bachelor degree (minimum of 180 ECTS credits) in either Economics, Finance, Business Administration or similar fields od education, or in IT, Engineering, Technical Science, mathematics, Physics, Chemistry or similar fields of education with sufficient knowledge of mathematics. The applicant must have a sufficient level of English of at least B2, or at least 1 academic year of comprehensive English instruction.

The admission procedure is two-round. In the first round, the applicants are ranked on the basis of their results in the previous level of study, motivation (motivation letter) and letters of recommendation. Representatives of all Partner Universities evaluate each applicant independently, and the final ranking is the average of these rankings. Candidates not fulfilling the criteria set out will receive 0 points and will not be evaluated in the first round. In the second round, the top-ranked students are invited to an online interview, which is attended by representatives of at least two Partner Universities for each individual student. The final ranking of the applicants is determined by the results of both the first and second rounds.

The results of the selection procedure are provided to the Coordinator. The formal admission decision is sent to every applicant by the Coordinator and signed by the dean of the Faculty of Economics and Administration (UPCE). The decision will be issued in accordance with Czech legislation. The Coordinator shall inform all other Partner Universities that the admission decisions have been issued and which selected applicants have been enrolled into the FINDATA Study Programme.

Applicants become students of the FINDATA Study Programme on the day of enrolment in studies at the Coordinator. In addition, every FINDATA student shall be enrolled locally











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by each Partner University where he/she spends one semester within one week after his/her arrival.

The Coordinator will exchange information with Partner Universities on admitted and enrolled students without delay. The Parties undertake to exchange regularly, at least twice a year at the end of each semester, the related information about students enrolled in the FINDATA study programme, including the transfer of records and study documentation. The Parties will immediately exchange information of high importance, e.g. a student's interruption of study, disciplinary issues and procedures, or procedures leading to termination of a student's study. The Parties will ensure that any transfer of information takes place only if permitted by the respective data protection regulations and is managed in accordance with those regulations. A separate agreement on data protection between all Partner Universities will set the detailed obligations.













Submitting application on the website – deadline for the 2024/2025 academic year is **31 March, 2024,** E-applications will be available **from 12 December, 2023** online at <u>www.upce.cz</u>.

Pay E-Application fee CZK 2,000.- till 31 March, 2024Pay for internal assessmenttill 31 March, 2024

(assessment is done by the Faculty of Economics and Administration in case you cannot prove previous studies with nostrification issued by the CZ government) your Payment details visible in the E-application. are The administrative fee is non-refundable!

Sending application attachments in English electronically (via email) to <u>findata@upce.cz</u> till **31 March, 2024** (motivation letter, two reference letters).

Submit and send the documents listed below (via post/forwarder) till 31 March, 2024:

- Curriculum vitae in English
- Copy of passport
- Two photographs in passport size
- Supporting documents (certified copies not the originals!) for assessment of applicant's previous education of CZK 600.- in case of not providing Czech recognition of Bachelor's education more details: <u>https://www.upce.cz/en/foreign-education-verification</u>

Delivery address Faculty of Economics and Administration University of Pardubice Barbora Pašková Studentská 95 Pardubice 53210 The Czech Republic









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III. <u>ACCEPTANCE REQUIREMENTS</u>

- o Fully completed a bachelor's degree or a master's degree.
- Submit a <u>nostrification or request verification of your bachelor's degree by the Faculty</u> of Economics and Administration (internal evaluation of the previous study is done for admission purposes only).
- Applicants must have an <u>academic bachelor's degree</u> (with a minimum of <u>180</u> <u>ECTS</u> credits) in either economics, finance, business management or a similar field, or in IT, technical sciences (including engineering and construction), mathematics, physics, chemistry, or a similar field with sufficient knowledge of mathematics.
- Knowledge of <u>English at a minimum level B2</u>, which must be proved by an official Certificate or by studying in English for at least one year.
- The applicant is required to pay the tuition fees and administration fees during the time specified above.
- \circ Meet other admission criteria agreed by the partners universities.











IV. **DETAILED ADMISSION CRITERIA**

Only applicants who meet the Acceptance Requirements listed above will be evaluated in the first round. If they do not meet these conditions, they will be awarded 0 points.

1st run till 31 March 2024

- Results of studies at the bachelor's degree level (study average) 0
- Motivation letter 0
- Two reference letters \circ

Motivation letter and reference letters should be sent electronically to email findata@upce.cz.

2nd run from 10 April, 2024 to 30 April, 2024

Candidates with the highest scores from the first round are invited to an online 0 interview.

The final ranking of applicants is determined by the results of the first and second rounds.

Taking Decisions on Acceptance

At most, a total of 100 applicants will be accepted into the full-time study programme based their overall on ranking. Due to the low number of applicants, the Dean may decide not to open the study programme.

Notice of Acceptance

The results of the admission procedure will be published on the University of Pardubice website no later than 5. 5. 2024. The Dean's Admission Letter will be ready to be picked up or posted the same day (CZ post or another forwarder).









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Review Proceedings

According to the § 50, par. 7 of the law no. 111/1998 Col., on universities and the change and completion of other laws (Law on Universities) as amended by the subsequent regulation, the applicant who has not been accepted or his/her authorized representative may apply for a review of the resolution within 30 days from the delivery day of the resolution, which should be sent to the attention of the Dean of the Faculty of Economics and Administration University of Pardubice.

Registration of Study

The student is obliged to appear on the day of registration at the Department of Education, which is set up for the first week of the academic year. For academic year 2024/25 the day for registration has been set out for 20 September, 2024. In the event the student does not attend the registration of study without written excuse within 5 days, their studies will be terminated immediately.

Deferment of Study

It is not possible to apply for the deferment of study.











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V. <u>CALENDAR WITH DEADLINES</u>

Deadline for submitting an application to study	12. 12. 2023 – 31. 3. 2024
Deadline for payment of administrative fees	till 31. 3. 2024
An officially certified copy of the Bachelor's diploma and Diploma supplement with translation into English and authentication of the document. (superlegalization, apostille) Foreign Education Verification Univerzita Pardubice (upce.cz)	till 31. 3. 2024
Sending application attachments in English electronically to <u>findata@upce.cz</u> (motivation letter, two reference letters)	till 31. 3. 2024
Tuition fees payment no later than the day of enrolment	Tuition fees payment no later than the day of enrolment
Online interview	10. 4. 2024 – 30. 4. 2024
Deadline for publication of results 1st round	till 5. 5. 2024
Enrolment of accepted applicants to the 1st year	20. 9. 2024









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VI. ENTRANCE EXAMINATION

Entrance Examination Evaluation

Overall grade of BSc (or preliminary grade if not finished yet)			
Overall grade of BSc		Quality of the institution (THE quartile)	
0-10 (weight 1.5; maximum points in total 15)		0-10 (weight 1; maximum points in total 10)	
Relevant study subjects du academic qualifications, and	rring BSc study, previ d/or relevant profession	ously obtained MSo al experience	c degree, relevant extra-
Relevant subjects and marks during BSc	Number of years since last graduation (BSc or MSc) – the longer, the less points	Additional relevant MSc study or work experience since BSc graduation	Extra-academic qualifications
0-10 (weight 2; maximum points in total 20)	0-10 (weight 0.5; maximum points in total 5)	0-10 (weight 1; maximum points in total 10)	0-10 (weight 0.5; maximum points in total 5)











Motivation letter		
Clear description of own qualifications and experience	Coherence of own intended career with FINDATA study programme	Quality of language use
0-5 (weight 0.5; maximum points in total 5)	0-5 (weight 0.5; maximum points in total 5)	0-5 (weight 0.5; maximum points in total 5)
Reference letters (two)		
Refer to academic and scientific qualifications and potential of the candidate with regard to the FINDATA programme	Refer to professional qualifications and/or potential of the candidate	Refer to personal qualifications and/or potential of the candidate
0-10 (weight 1; maximum points in total 10)	0-10 (weight 0.5; maximum points in total 5)	0-10 (weight 0.5; maximum points in total 5)

- Each candidate will be evaluated within a point range. 0
- All points obtained will be added together. 0
- Total a maximum of 100 points may be awarded. 0
- Applicants with a total score of less than 50 points will not be admitted to the FINDATA 0 study programme.











4. AWARD REGULATIONS

I. **SUMMARY**

To be eligible for the award of the degree, a student must undertake the programme of study as approved by the Academic Board and obtain at least 120 ECTS at Master's level (with at least 60 ECTS in year 1 and 60 ECTS in year 2). Successful students receive a joint award from the institutions that they have attended.

The University reserves the right not to issue the degree if the student has not fulfilled all obligations to the University, financial and/or otherwise.

The degree certificate shall be accompanied by academic transcripts of records, issued by the institutions which the student attended in their mobility track, as well as a joint Diploma Supplement. The transcript is a list which specifies all the components of the Masters programme and the grades obtained in assessments.

II. **GRADING SCALE**

The grading system for the programme shall be as follows:

Consortium Mark	University of Pardubice	European University Cyprus	LUMSA	Vilnius University
Α	A	A (90 – 100%)	A (30/30, cum	10 (95 – 100%)
			laudae)	
В	В	B+ (85 - 89%)	B (30)	9 (85 - 94%)
С	С	B (80 - 84%)	C (27-29)	8 (75 - 84%)
D	D	C+ (75 – 79%)	D (24-26)	7 (65 – 74%)
E	E	<i>C</i> (70 – 74%)	E (18 – 23)	6 (55 –64%)
E	E	<i>C</i> (70 – 74%)	E (18 – 23)	5 (50 - 54%)
F (fail)	F (under 60%)	0 -69%	<i>F</i> (0 – 17)	1-4 (0 – 49%)

VII. SUBJECT EXEMPTION AND CREDIT TRANSFER

Students may be eligible to obtain exemptions from specific subjects given that they have already been taught a module in a previous programme. Certain conditions apply such as successfully completing a similar programme and that it was taught on a postgraduate degree but more conditions may apply, depending each department.











If students consider their previous study relevant to the current programme, they can get in contact with the University that is offering that specific module, for subject exemption or credit transfer.

Please note that the exempted subject will not be counted for satisfying the credit requirements of the programme and therefore students should consult each respective department and take another subject in its place.

VIII. <u>Resit Procedure</u>

If a student fails a course at a particular university (University A), the following actions will be taken by that university:

1. Online consultations between the student who failed and the professor from University A will be arranged to address academic issues and resolve any material-related issues. It's important to note that the student who failed may already be located in another country.

2. While the student is attending courses at another university (University B), they will take the resit exams face-to-face in university B. The exam paper will be sent from University A to University B by email. The student will be situated in a designated room where a local teacher will act as a supervisor, ensuring academic integrity through a local "proctoring" system.

3. Finally, University B will scan the exam paper and the student's answers and send them to the responsible professor at University A. The paper will also be sent by mail to be archived.

This approach aims to facilitate the student's academic progress while avoiding any additional costs.

IX. <u>GRADUATION CEREMONY</u>

Successful graduates of the FINDATA study programme shall receive a joint diploma signed by all the Partner Universities representatives certifying the programme completion, which form is to be in accordance with the laws of all the states where the Partner Universities are based. The award ceremony will take place at the coordinator (University of Pardubice) and representatives of all other Partner University may attend it.











5. TRAVELLING SCHEDULES

All travel arrangements are the students' responsibility. Students should allow themselves a sufficient amount of time to settle in each country and check the Universities' academic calendars for the semester they are going to be attending via their websites.

LINKS: European University Cyprus https://euc.ac.cy/en/academics/academic-calendar/

University of Pardubice https://www.upce.cz/en/upce/academic-calendar-20242025

LUMSA University https://lumsa.it/en/academic-year

Vilnius University

http://www.vu.lt/en/studies/exchange-students/academic-calendar











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6. ACCOMMODATION

All universities can provide assistance regarding accommodation with dedicated staff. There are multiple university housing and off-campus accommodation options to choose from, according to each student's budget and personal needs. Whilst accommodation is widely available, interested students are encouraged to get in contact early to view and book housing before the busiest months which normally are June to September. More information in detail can be found in the websites below.

LINKS:

European University Cyprus https://euc.ac.cy/en/campus-life/housing/

University of Pardubice https://www.upce.cz/en/accommodation-of-students

LUMSA University https://lumsa.it/en/accommodation

Vilnius University

https://www.vu.lt/en/studies/master-studies/living-in-lithuania/accommodation











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7. FINANCIAL INFORMATION

I. **FEES & FUNDING**

The tuition fee for the FINDATA Programme is EUR 6,000 per academic year. The tuition fee is expected to change during time and shall be adjusted by the Joint Management Steering Committee, in consultation with the authorities of the Partner Universities. The amount of tuition fee will be announced in a timely manner on the FINDATA programme website and the websites of all Partner Universities.

The tuition fees cover the FINDATA Programme courses, institutional enrolments, insurance and extra costs for organising the programme. The students need to cover their living, travel and subsistence costs. The Partner Universities shall provide help to students looking for grants to cover their mobilities.

The payment must be made immediately after admission but no later than on the day of enrolment, which has been set for 20 September 2024.

Once paid, the tuition fee is returnable only after submitting the confirmation of visa denial issued by the authorized Embassy of the Czech Republic to the Department of Education at FEA (refunds on tuition fees will be deducted a EUR 30 processing fee).













II. <u>HEALTH INSURANCE</u>

All international students must have health insurance, covering medical expenses incurred as a result of an accident or health problems that arise after the student's arrival in each country. EU students are strongly advised to acquire a European Health Insurance Card, which gives access to basic health care in EU member states. Those who do not have the European Health Insurance Card are required to have private health insurance.

III. ESTIMATED COSTS OF LIVING

Below you can find information regarding the distribution of expenses while living in each of

Pardubice (University of Pardubice)



Nicosia (European University Cyprus)



the four cities where the universities are located. [NUMBEO (2024), statistical model used from <u>https://www.numbeo.com/cost-of-living/</u>]







Rome (LUMSA University)

14.8%

30.4%

10.8%

Vilnius (Vilnius University)

28.8%



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Transportation
 Clothing And Shoes

Markets

Sports And Leisure

Utilities (Monthly)

Rent Per Month

Transportation

Markets

Clothing And Shoes

Sports And Leisure

Utilities (Monthly)

Rent Per Month

Restaurants

Restaurants







Unl Join at 4

Unlock Your Financial Data Analysis Career: Joint Master's Degree Programme FINDATA at 4 European Universities





UNIVERSITY OF PARDUBICE

https://fes.upce.cz/en Studentska 95, Pardubice 532 10, the Czech Republic

EUROPEAN UNIVERSITY - CYPRUS LTD.

https://euc.ac.cy/en/ 6 Diogenes Str., Nicosia, Post Code: 1516, Cyprus

LIBERA UNIVERSITA ' MARIA SS ASSUNTA – LUMSA

https://www.lumsa.it/en Via della Traspontina 21, 00193 Rome

VILNIUS UNIVERSITY

https://www.vu.lt/ Universiteto g. 3, LT-01513, Vilnius, Lithuania









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STUDY COORDINATOR

PHONE: +420 466 036 058

EMAIL: findata@upce.cz

Ms. Barbora Pašková

Funded by the European Union

MORE INFORMATION

INSTAGRAM & FACEBOOK; <u>@emfindataeu</u> WEBSITE; <u>https://www.emfindata.eu/</u>









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9. ANNEXES

LIST OF COMPULSORY COURSES AND ELECTIVE COURSES

A/A	COURSE
1	Economics and Financial Aspects of Innovation and Sustainability
2	Principles of Artificial Intelligence and Machine Learning
3	Applied Financial Econometrics
4	EU Law and European Values
5	Research Methods
6	Principles of programming for R
7	International Finance and Macroeconomics
8	Computational Finance
9	Big Data Analytics in Finance
10	Machine Learning in Finance
11	Programming for Python
12	Innovation in Banking and FINTECH
13	Sustainable Finance and Investments
14	Advanced Corporate Finance
15	Ethics and Humanism in Digital Era
16	Financial Risk Management
17	Corporate Strategy and Sustainability
18	Integrity and Ethics in Finance
19	Behavioural Finance for Sustainable Development
20	Technical Analysis of Financial Markets
21	Investing for Environmental and Social Impact
22	Financial Technologies and Alternative Investments
23	Equity Securities
24	Investment Portfolio Analysis
25	Master diploma thesis









COURSE DESCRIPTIONS

Course Title	Economics and Financial Aspects of Innovations and Sustainability				
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd	Cycle)			
Year / Semester	1 st Year / 1 st	Semester			
Teacher's Name	Viktor Proko	р			
ECTS	5	Lectures / week	2 Hours / 13 weeks	Laboratories / week	2 Hours / 13 weeks
Course Purpose and Objectives	The aim of the course is to provide students with the knowledge about the economic and financial aspects of innovation and sustainable development, cooperation at the university-industry-government level, the emergence of innovative ecosystems, also based on the principles of sustainability and circular economy, measuring the (eco-) innovation performance of different entities, and the role of the public sector as one of the donors of these processes. A student who has successfully completed the course can explain the principles on which the main regional economic theories are based; describe the main determinants of (eco-) innovation activities; distinguish the role of different types of intellectual capital; describe the main theoretical concepts dealing with the creation of (eco-) innovations at the national and regional level; explain the causes of (eco-) innovation failure of companies and states; distinguish the different roles of the public and private sectors in creating (eco-) innovation; identify the main barriers to successful (eco-) innovation cooperation between different partners; identify ways to measure (eco-) innovation performance; distinguish and characterize different ways of financing innovation activities and describe economic and financial aspects of (eco-) innovation.				
Learning Outcomes	 Upon successful completion of this course students should be able to: identify and list the circumstances and causes that affect (eco-) innovation processes at regional, national, EU levels. interpret the economic and financial problems encountered by individual actors of cooperation at the level of university, industry, government; apply the results of competitiveness and (eco-) innovation performance analyses at firm, regional, and country levels; 				











	 graphically interpret the scheme of the innovation ecosystem and describe the individual links that arise within this ecosystem; formulate opinions on (eco-) innovation processes and identify factors that influence the course of these processes; be properly oriented in the issues of financial support for cooperation, knowledge creation, and (eco-) innovation; propose ways that will lead to more efficient spending of public funds to support research and development and (eco-) innovation. 		
Prerequisites	None	Co-requisites	None
Course Content	 The course content is developed as follows: Theories and models of economic and regional development and competitiveness. Production function and its factors - role of intellectual capital, human capital, and labor mobility. Innovation and its determinants, open vs. closed innovation concepts. Sustainability- and circular economy-oriented innovation and the growing role of environmental behavior. National and regional innovation ecosystems and its transition towards sustainability. Regional innovation policy and governance, economic and financial aspects of (eco-) innovation. Public funding for innovation, R&D subsidies, government financial and non-financial support for (eco-) innovation. Networking and cooperation, university-industry-government relationships, the role of environmental stakeholders. Measuring and monitoring innovation performance and regional competitiveness. Research and (eco-) innovation contribution to the achievement of the Sustainable Development Goals. 		
Teaching Methodology	Face-to-Face		
Bibliography	Compulsory literature Prokop, V., Stejskal, J., Horbach, J., & Gerstlberger, W. Business Models for the Circular Economy: A European Perspective. Springer Nature. STEJSKAL, J., HAJEK, P., HUDEC, O. Knowledge spillovers in regional innovation systems. Berlin: Springer. Recommended literature		











	Urbano, D., Aparicio, S., Auc	Iretsch, D. B. Institutions,	
	entrepreneurship, and economic perfe	ormance. Springer International	
	Publishing.		
	Capello, R., Nijkamp, P. Handbook of Regional Growth and		
	Development Theories. Cheltenham: Edward Elgar Publishing.		
	Horbach, J., & Reif, C New developments in eco-innovation research.		
	Springer International Publishing.		
Assessment	The assessment of student has two st	eps:	
	Examination	60%	
	Assignments	40%	
	1.	100%	
Language	English		

Course Title	Principles of Artificial Intelligence and Machine Learning
Course Code	N/A











Course Type	Compulsory				
Level	Master (2 nd Cycle)				
Year / Semester	1 st Year / 1 st Semester				
Teacher's Name	Petr Hájek				
ECTS	5	Lectures / week	2 Hours / 13 weeks	Laboratories / week	2 Hours / 13 weeks
Course Purpose and Objectives	The aim of the course is to acquaint students with principles of artificial intelligence and machine learning and possibilities of their application in the design of intelligent systems. A student who has successfully completed the course can explain the principles of artificial and computational intelligence methods; characterize and distinguish between probabilistic and fuzzy approaches to handling uncertainty; describe the structure and behavior of fuzzy inference systems; categorize and compare different neural network models; characterize evolutionary stochastic optimization algorithms and distinguish individual algorithms; compare the advantages and disadvantages of artificial and computational intelligence methods.				
Learning Outcomes	 Upon successful completion of this course students should be able to: derive knowledge using the inference rules of propositional fuzzy logic and predicate fuzzy logic of the first order; design a knowledge base of an expert system in a logical programming language; design a suitable neural network structure for a given task and train it on pre-processed structured and unstructured data; design the objective function and optimize the task using evolutionary stochastic optimization algorithms; design a hybrid intelligent system taking advantage of the combination of different methods of artificial and computational intelligence. 				
Prerequisites	None	Co	requisites	None	
Course Content	 The course content is developed as follows: Artificial intelligence and computational intelligence. Machine learning, classification and prediction tasks. Data analytics using machine learning. Neural network models. The learning process of neural networks. Deep learning. 				









	 Fuzzy sets and fuzzy inference systems. Evolutionary stochastic optimization algorithms. Hybrid systems. Expert systems and knowledge-based systems. Examples of intelligent systems in financial domain. 	
Teaching Methodology	Face-to-Face	
Bibliography	Compulsory literature kruse et al. Computational intelligence: London: Springer. Engelbrecht, A. P. Computational Chichester: John Wiley & Sons. Negnevitsky, M. Artificial intelligence: Harlow: Pearson Education. Recommended literature RUTKOWSKI, L. Computational Techniques. Berlin: Springer Verlag, (L	A methodological introduction. intelligence: An introduction. A guide to intelligent systems. intelligence: Methods and atest Edition).
Assessment	Examination Assignments	60% 40% 100%
Language	English	

Course Title	Applied Financial Econometrics
Course Code	N/A
Course Type	Compulsory










Level	Master (2 nd Cycle)				
Year / Semester	1 st Year / 1 st Semester				
Teacher's Name	Jana Heckenbergerová				
ECTS	5 Lectures / week 1 Hours / Laboratories / 3 Hou 13 weeks week 13 weeks				3 Hours / 13 weeks
Course Purpose and Objectives	The aim of the course econometric methods a financial time series.	is to applical	acquaint st ble to the	udents with stat analysis of ecor	istical and nomic and
Learning Outcomes	 Upon successful completion of this course students should be able to: construct an econometric model describing the dependence between economic variables, assess the quality of the econometric model and its ability to represent the modelled reality, interpret the econometric model and the estimated parameters, predict the evolution of economic variables based on simple time series models. 				
Prerequisites	None	Co-re	quisites	None	
Course Content	 The course content is developed as follows: Introduction to econometrics – socio-economic phenomena analyses Classical Gaussian linear regression model. Nonlinear models. Logistic regression and its utilization. Autocorrelation methods for univariate time series. Box-Jenkins methodology – basic models and their construction. Multivariate time series. Vector autoregression. Granger Test of Causality. Introduction to panel data analysis - dynamic panel data models. Unit root analysis. Stochastic processes in econometrics – Markov processes, Poisson process, random walk, Brownian process. Modeling the development of financial assets. Simulation of the development of interest rates - Vašiček's model and its augmentations. Black-Scholes model. 				









Teaching Methodology	Face-to-Face					
Bibliography	Compulsory literature KENNEDY, P. A guide to econome Blackwell, (Latest Edition) ASHLEY, R. A. Fundamentals of ap Wiley, (Latest Edition). MADDALA, G. S. Introduction to eco Wiley, (Latest Edition) Recommended literature KLEIBER, C., ZEILEIS, A. Applied eco Springer. HENDRY, D. F. Dynamic econometr Press. JOHNSTON, J., DiNARDO, J. Econometr York: McGraw-Hill. SALVATORE, D., REAGLE, D. Statist New York: McGraw-Hill.	erics. 6. vyd. Madden: Wiley- oplied econometrics. Hoboken: onometrics. 3. vyd. Chichester: conometrics with R. New York: rics. Oxford: Oxford University ometric methods. 4. vyd. New tics and econometrics. 2. vyd.				
Assessment	Examination Assignments	60% 40% 100%				
Language	English					

Course Title	EU Law and European Values
Course Code	N/A
Course Type	Compulsory











Level	Master (2 nd Cycle)						
Year / Semester	1 st Year / 1 st Semester						
Teacher's Name	Jana Janderov	νá					
ECTS	5 Lectures / week 2 Hours / Seminars / 2 Hours / 13 weeks / 13 weeks						
Course Purpose and Objectives	The aim of the course is to acquaint students with fundamentals of EU law and its principles, values the EU is based on, and the basics of EU regulation in the field of finance. A student who has successfully completed the course can explain which are the sources of EU law, what are the relationships between the different sources and how they interact with national legal orders; describe the values EU is based on; explain the nature and character of the general principles of EU law; characterize the institutions of the European Union, including their powers and competences; justify the need for harmonization of EU law; explain the forms and methods of harmonization, and the application and interpretation of EU law at national and EU level; compare the different types of action before the Court of Justice of the EU, in particular in terms of their objective; explain the nature of the Single Market and the legal instruments in the area of the four fundamental freedoms of the EU; distinguish between different anti-competitive practices; characterize EU consumer protection policy in the field of finance; characterize fundamental rules of EU banking and financial law; compare the advantages and disadvantages of EMU.						
Learning Outcomes	 Upon successful completion of this course students should be able to: independently search for EU legislation and relevant case law; interpret a simple judgment of the CJEU, including its implications for Member States, in a clear way; identify fundamental inconsistencies between legal actions and EU law in selected areas (in particular competition and financial and banking law) and suggest ways of eliminating them; practically solve real legal problems involving the assertion of rights arising from human rights and the free movement of goods, persons, services and capital; write an essay that critically analyses relevant issues of EU banking and financial law. 						
Prerequisites	None	None Co-requisites None					
Course Content	The course content is developed as follows:						











	 EU historical development and its aim to promote peace, its values and the well-being of its peoples Fundamental values – respect for human dignity, freedom, democracy, equality, the rule of law Human rights protection EU institutions - powers Sources of EU law and specific principles of its application Harmonization and Court of Justice role in interpretation Free movement of goods, persons, services, and capital Protection of competition Regulations for exchange and investment controls Integration of banking, insurance, and investment services Consumer protection and competition rules within the EU regarding financial services Establishment of the economic and monetary union 				
Teaching Methodology	Face-to-Face				
Bibliography	Compulsory literature Treaty on European Union Treaty on the Functioning of the European Union. Chalmers, D., Davies G., Monti G.European Union Law. Fourth Edition. Cambridge: Cambridge University Press. Case law list (approx. 25 cases) shall be provided during the first seminar and available from the CJEU internet pages. Recommended literature VEIL et al. (Latest Edition). European Capital Markets Law (2nd ed.). Bloomsbury Publishing. ISBN: 978-1-50995-848-1				
Assessment	Examination Assignments	60% 40% 100%			
Language	English	· · · · · · · · · · · · · · · · · · ·			

Course Title	Research Methods
Course Code	N/A











Course Type	Compulsory						
Level	Master (2 nd Cycle)						
Year / Semester	1 st Year / 1 st Semester						
Teacher's Name	Jan Stejskal						
ECTS	5 Lectures / week 2 Hours / Laboratories / 2 Hours / 13 weeks week 13 weeks						
Course Purpose and Objectives	The aim of this course is to present research approaches, research methodology and a wide range of research methods and procedures that will enable students to acquire the tools to carry out analytical activities in the field of economics and finance. An essential part of the goal is to explain to students how to choose an appropriate method, modelling and implementing of economic strategies corresponding to a particular problem, analysis and assessment of regional research and reports on economic issues under implementation, formation of independent work abilities and erudition, systematic view to the qualitative and quantitative research paradigms and their place in the field of economics and finance. A student who has successfully completed the course can apply knowledge and abilities of research methods when professionally analyse and evaluate reports of applied research, presented in professional and scientific literature, discussing on both general issues of scientific cognition both particular development and economic research cases, showing critical view on research methodology and results analysis; know typological diversity of research, research strategies, specificity of the economy and finance and are able to apply correctly these strategies and instruments						
Learning Outcomes	 Upon successful completion of this course students should be able to: notice theoretical problems of cognition in the field of economics and finance; identify of theoretical and practical problems in the socioeconomical policy and finance and their implementation, to conceptualise them formulating problem questions and hypotheses; model research strategy, creates research design and professionally perform empirical research; on the ground of research data, to apply data analysis methodology and data analysis software both for quantitative, both for qualitative or mixed research approach; 						









	 discuss with profesional auditory about economy research methodology issues 				
Prerequisites	None Co-requisites None				
Course Content	 The course content is developed as follows: The Introduction to Research Methodology The Selection of a Research Approach Review of the Literature Quantitative Research Methods in the field of Economics and Finance Qualitative Research Methods in the field of Economics and Finance Mixed Research Approach in the field of Economics and Finance Research Design. The Purpose Statement. Research Questions and Hypotheses Writing Strategies and Research Ethics Major Principles and Methods of Qualitative Data Analysis with Selected Software Systematisation and Analysis of Statistical Research Data with 				
Teaching Methodology	Face-to-Face				
Bibliography	Compulsory literature Tan, W. C. K Research methods: A practical guide for students and researchers. World Scientific. Recommended literature Pajo, BIntroduction to research methods: A hands-on approach. Sage publications. Bell, E., Bryman, A., & Harley, B. Business research methods. Oxford university press. Vásquez, C. (Ed.)Research methods for digital discourse analysis. Bloomsbury Publishing.				
Assessment	Examination60%Assignments40%100%				
Language	English				









Course Title	Principles of Programming for R						
Course Code	N/A	N/A					
Course Type	Elective						
Level	Master (2 nd	Cycle)					
Year / Semester	1 st Year / 1 st	Semester					
Teacher's Name	Hana Kopáč	ková					
ECTS	5 Lectures / week 1 Hours / Laboratories / 2 Hours / 13 weeks week 2 Hours / 13 weeks						
Course Purpose and Objectives	The course of the data programmin student who principles of data mana characteristi compare dif describe the approaches Upon succes • struct • define • desig • use fu data i • build	The course aims to introduce students to the key theoretical concepts of the data science discipline. The course specifically focuses on R programming with the emphasize on the financial data analytics. A student who has successfully completed the course can explain the principles of the problem decomposition; describe the fundamentals of data management in financial data analytics; describe main characteristics of statistical computing in R language; categorize and compare different data exploration and visualization methods in R; describe the process of model building in R; characterize different approaches in financial data analytics. Upon successful completion of this course students should be able to: • structure complex problems; • define and extract appropriate data for the analysis; • design and implement basic algorithms in R; • use functions from main packages to explore and visualize the data in R;					
Prerequisites	None Co-requisites None						
Course Content	 The course content is developed as follows: Definition and decomposition of problems. Fundamental components of algorithms and design methods. Data selection and extraction for financial data analytics. Data types and data structures. Overview of R language – introduction to statistical computing Review of the main packages and key points in R Data import and preparation (cleaning, transformation) Basic Plotting and visualization Exploring the data 						









	 Building the model Financial data analytics – use cases 			
Teaching Methodology	Face-to-Face			
Bibliography	Compulsory literature Wickham, H., & Grolemund, G. R for data science: import, tidy, transform, visualize, and model data. O'Reilly Media, Inc. Recommended literature GENTLE, J.E. R for Data Science and Applications in Finance. Fairfax			
Assessment	Examination Assignments	60% 40% 100%		
Language	English			

Course Title	International Finance and Macroeconomics
Course Code	N/A
Course Type	Electives
Level	Master (2 nd Cycle)
Year / Semester	1 st Year / 1 st Semester









Teacher's Name	Liběna Černoho	Liběna Černohorská, Solomon Gyamfi					
ECTS	5 Le	ectures / week	2 Hours / 13 weeks	Laboratories / week	2 Hours / 13 weeks		
Course Purpose and Objectives	 The aim of the course is to provide a broader knowledge of international monetary relations and macroeconomic principles. A student who has successfully completed the course can: explain the historical context and importance of exchange rates; characterize balance of payments; characterize the exchange market; characterize foreign exchange operations; explain the historical development of international monetary system, explain macroeconomics policies, aims and tools. be orientated in the field of international finance and macroeconomics; analyze the historical development of monetary system; interpret the importance of international finance for economic entities, evaluate effectiveness of monetary and fiscal policy. 						
Learning Outcomes	 Upon successful completion of this course students should be able to: use their expertise and skills to solve the problems of international finance and macroeconomics; comprehensibly and convincingly to experts and laymen information about the kind of professional problems in the field of internatioanl finance and macroeconomics and their own opinion on their solution. 						
Prerequisites	None	Co-re	equisites	None			
Course Content	 The course content is developed as follows: Macroeconomic trends, characteristic and basic range of problems. Macroeconomic policy, aims and tools. International finance, characteristic and basic range of problems. Historical development of international monetary system, Brettonwood institutions, Euro, European Monetary Union. Balance of payments, concept, structure, balance, factors influencing balance of payments, balancing processes. 						









	 Exchange rate, its systems, determinants, exchange rate in long and short period, management of exchange rates, fundamental and technical analysis of exchange rate. Foreign exchange reserves, its structure and management, exchange intervention of central bank. Exchange market, its structure, foreign exchange operations - term and prompt, foreign exchange expositions and hazards. Financial Globalization: Opportunity and Crisis. Model IS-LM-BP (Mundell-Fleming model). 		
Teaching Methodology	Face-to-Face		
Bibliography	Compulsory literature Krugman, P. R., Obstfeld, M. Melitz M. J. International Finance Theory and Policy. Harlow: Pearson. Parkin, M. Economics. Boston: Pearson. Recommended literature Eiteman, D. K., Stonehill, A. I., Moffett, J. H.Multinational Business Finance. Harlow: Pearson Gandolfo, G International Finance and Open Economy		
Assessment	Examination60%Assignments40%100%		
Language	English		

Course Title	Computational Finance
Course Code	N/A
Course Type	Compulsory
Level	Master (2 nd Cycle)











Year / Semester	1 st Year / 2 nd Semester			
Teacher's Name	Dr. Andreas Papayiannis/Dr. Simona Mihai			
ECTS	10 Lectures /	week 3 Hours / 14 weeks	Laboratories / None week	
Course Purpose and Objectives	Students through this course will be able to study the scientific computing and quantitative skills and apply those in pricing financial derivatives and will be familiarized with the new technological developments in this field. The course covers basic stochastic modeling with hands-on practice in R, in order to value different financial products using the Monte Carlo and Binomial Tree methods, perform variance reduction techniques and other advanced quantitative methods. Direct Market Access is introduced to students with the applications in electronic trading.			
Learning Outcomes	 Upon successful completion of this course students should be able to: Manage basic scientific computing skills; Simulate the financial products' dynamics and implementing pricing models of derivatives through Monte Carlo method and Binomial Trees; Implement the computing tools to program Manage the direct market access; Understand, apply and critically evaluate the algorithmic trading systems and trading strategies 			
Prerequisites	None	Co-requisites	None	
Course Content	 The course content is developed as follows: Refresh on key statistical principles, and introduction to asset prices and stock price dynamics Introduction to Monte Carlo method and simulations for generating random numbers, pricing of European/Vanilla call/put options pricing other path-dependent options studying variance reduction techniques performing advanced applications in higher dimensions and/or complicated option payoffs Introduction to the Binomial Tree method for pricing European/Vanilla call/put options applications to early-exercise options hedging derivatives performing advanced applications in higher dimensions and/or complicated option payoffs 			









	 Introduction to Direct Market Access is introduced to students with basic applications in electronic trading theory on orders and algorithms Implementing trading strategies 		
Teaching Methodology	Face-to-Face		
Bibliography	Glasserman, P. Monte Carlo Methods in Financial Engineering, Springer. Hull J. C. Options, Futures, and other derivatives, Eighth Edition, Prentice Hall. Ruppert D. and Matteson D. S. Statistics and Data Analysis for Financial Engineering with R examples, Second Edition, Springer. Johnson B. Algorithmic Trading and DMA: An introduction to direct		
Assessment	Examinations Self-Assignments Group Assignment	50% 10% 40% 100%	
Language	English		

Course Title	Big Data Analytics in Finance
Course Code	N/A
Course Type	Compulsory











Level	Master (2 nd Cycle)			
Year / Semester	1 st Year / 2 nd Semester			
Teacher's Name	Dr. Alexis Kythreotis			
ECTS	10 Lectures / week 3 Hours / 14 weeks Laboratories / week None			
Course Purpose and Objectives	This course introduces students to the basic concepts, methods and approaches of data analytics in Accounting and Finance. The students will program and test business intelligence software, such as Google data studio or/and Tableau or/and Alteryx or/and Power BI. Through the software, the students will learn to prepare, clean, analyse and summarize the accounting and financial data and create visualizations. Moreover, students will be familiarized with relevant conceptual IT frameworks in order to evaluate the functionality and effectiveness of Accounting Information Systems (AIS), and to analyze the contemporary security and control aspects of such systems.			
Learning Outcomes	 Upon successful completion of this course students should be able to: Collect (using EIKON database of Thomson Reuters / S&P Capital IQ Platform), clean and transform accounting and financial data; Summarize, visualize and present accounting and financial data; Analyze accounting and financial data with basic analytical approaches; Obtain the knowledge required to function as a systems accountant; Evaluate and apply the knowledge of management support systems to accounting and related areas; Analyse and critically evaluate the current development of enterprisewide systems and their contribution to business process reengineering; Apply and test well-known systems development methodologies for AIS implementations; Program and test business intelligence software, such as Google data studio or/and Tableau or/and Alteryx or/and Power BI. Critically evaluate the accounting controls and security measures in AIS 			
Prerequisites	AEM600,AEM610, AEM620 Co-requisites None			
Course Content	The course content is developed as follows: Data preparation and cleaning; Data analytics approaches; Data visualization and summarization.			









	Diagnostic, predictive and prescriptive analytics in managerial and financial accounting.			
	Fundamental concepts of Accounting Information Systems (AIS)			
	Contemporary Enterprise Resource Planning systems (ERP).			
	AIS application to major transaction cycles. The Revenue Cycle. The Expenditure Cycle. The Financial Reporting Systems.			
	Management decision support systems	s and Business Intelligence (BI)		
	Contemporary systems development methodologies for AIS. Software development life cycle. Prototyping. End-user Development.			
	Ethics, Fraud and IT controls.			
	Hands-on EIKON database / S&P Capital IQ Platform.			
	Hands-on visualisation software – Google data studio or/and Tableau or/and Alteryx or/and Power BI.			
Teaching Methodology	Face-to-Face			
Bibliography	Richardson, Teeter and Terrell. Data Analytics for Accounting, McGraw-Hill. J.A. Hall, Accounting Information Systems, Cengage Learning. J.A. Hall, Information Technology Auditing, Cengage Learning. M.B. Romney and P.J. Steinbart, Accounting Information Systems, Pearson. K.C. Laudon and J.P. Laudon, MIS: Managing the Digital Firm, Global Edition, latest edition, Pearson.			
Assessment	Examinations Assignments Class Participation and Attendance	50% 40% 10% 100%		
Language	English			









Course Title	Machine Learning in Finance				
Course Code	N/A	N/A			
Course Type	Elective				
Level	Master (2 nd	cycle)			
Year / Semester	2 nd Year / 3 ^r	^d Semester			
Teacher's Name	Dr. Klea Par	nayidou			
ECTS	10	Lectures / week	3 Hours / 14 weeks	Laboratories / week	None
Course Purpose Objectives	The course introduces the fundamental concepts, theory, and algorithmic i Machine Learning. It provides the student both with a foundation for either a ML techniques on real-world problem or performing research on developing ne algorithms. It also forms a foundation for several other Data Science and Al o including advanced topics in ML, natural language processing, Big Data Analy others. Specifically, the course focuses on supervised classification technique and advanced classifiers (logistic regression, naïve Bayes classifier, K- neighbors, support vector machines, decision trees, random forests), st hypothesis testing, metrics of performance (ROC curves and AUC), estim- performance and tuning of hyper-parameters (cross-validation, nested validation, and bootstrap bias corrected CV), and feature selection (forward-ba search, lasso, orthogonal matching pursuit).				
Learning Outcomes	 Upon successful completion of this course students should be able to: Define basic ML tasks and types of analysis, such as supervised learning, reinforcement learning, classification and reguland feature selection. Discuss the inner workings of standard ML classification and feature selections. Illustrate how to solve the problem of selecting algorithms, tuning their parameters, and estimating the performance of the final predictive mod. Perform and apply ML pipelines to real-world problems, dealing with persuch as representing the problems as an ML task, representing approximate data, applying and tuning an ML pipeline, and interpreting results. Define key statistical estimation and hypothesis testing concepts, with on the ones that are routinely employed within ML algorithms. Have a solid, foundational basis to perform ML research and proceed with courses that employ ML algorithms and concepts. 				
Prerequisites	None	Co-	equisites	None	









Course Content	The course content is developed as follows:
	1) Introduction to ML, supervised, unsupervised, reinforcement learning, hyperest (models) spaces, examples of ML applications
	2) Probability theory and concepts for ML, axioms of probability, conditional pro Bayes theorem, maximum likelihood estimation, maximum a posteriori estima
	3) Logistic Regression and fitting with gradient descent
	4) Hypothesis testing, and permutation-based hypothesis testing
	5) Naïve Bayes and K-Nearest Neighbors
	6) Decision Trees and Random Forests
	7) Metrics of performance, Receiver Operating Characteristic Curves (ROC), a Under the ROC curve
	8 and 9) Estimation of performance and hyper-parameter tuning using cross vate techniques
	10) Basics of optimization and constrained optimization
	11, 12) Support Vector Machines
	13) Basic Feature Selection
	All lectures will consist of a theoretical part presenting concepts and technique practical part were the ML techniques will be applied for problem solving.
Teaching	Face to Face
Methodology	
Bibliography	Machine Learning, Tom Mitchell, McGraw Hill, Latest Edition
	Pattern Recognition and Machine Learning, Christopher Bishop, Springer Edition
	The Elements of Statistical Learning, Jerome H. Friedman, Robert Tibshira Trevor Hastie, Latest Edition, Springer
	Witten, Trevor Hastie and Robert Tibshirani, Springer, Latest Edition











Assessment	Examinations Assignments Class Participation and Attendance	50% 40% 10% 100%	
Language	English		

Course Title	Programming for Python				
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd	Cycle)			
Year / Semester	1 st Year / 1 st	Semester			
Teacher's Name	Dr. Andreas	Papayiannis			
ECTS	10	10Lectures / week3 Hours / 14 weeksLaboratories / weekNone			
Course Purpose and Objectives	The course aims to Introduce students to the key theoretical concepts of the computer science discipline from theoretical concepts and areas of study to the role of computer scientists in today's society. The course specifically focuses on Python programming.				
Learning Outcomes	 Upon successful completion of this course student will be able to: Critically assess the key theoretical concepts of the Computer Science discipline; Argue about the role and ethical responsibility of Computer Scientists in our society; Explain and use basic concepts in programming; Construct and execute basic programs in Python; Design and implement basic algorithms in Python; Use external libraries with Python; Use Python to download financial data from web sources; Graphically visualise data and results of statistical calculations 				
Prerequisites	None Co-requisites None				









Course Content	The course content is developed as follows:		
	Key theoretical concepts of the computer science discipline. General introduction to programming and students will learn and practice programming concepts along with tackling practical issues in statistical computing in Python.		
	 Programming in Python Review of the main packages and key points in Python Reading and writing efficient code in Python Basic Plotting and visualization The NumPy and Pandas Libraries 		
	 Introduction to basic statistical applications with practical examples in Python Descriptive statistics Simulations and random numbers Extracting financial data from the web 		
Teaching Methodology	Face-to-Face		
Bibliography	 Deitel and Deitel: Intro to Python for Computer Science and Data Science, Learning to Program With AI, Big Data and the Cloud Pearson. Python for Data Analysis, W. McKinney, O' Reilly. 		
Assessment	Examinations Self-Assignments Group Project	50% 10% 40% 100%	
Language	English		

Innovation in Banking and Fintech











Course Code	N/A					
Course Type	Compulsory					
Level	Master (2 nd Cy	/cle)				
Year / Semester	2 st Year / 1 st S	Semester				
Teacher's Name	Claudio Giann	otti				
ECTS	6 L	6 Lectures / week 4 Hours / Laboratories / 10 weeks				
Course Purpose and Objectives	The aim of the course is to provide knowledge and experience on innovation in banking and finance and on the effect of changes in consumer preferences, technology, regulation, and supervisory requirements. This leads to new business models, applications, processes, and services. At the end of the course, students will be able to understand the rules, actors and services that make up the Fintech ecosystem and open finance, and the related changes and					
Learning Outcomes	 Upon successful completion of this course, students will be able to: Demonstrate a comprehensive understanding of the fintech ecosystem, including its key components, participants, technologies, and regulatory frameworks. Analyse and assess emerging technologies within the banking and fintech sector, focusing on their potential impacts and practical applications. Develop innovative strategies for financial institutions, encompassing the creation of business plans for fintech startups and the evaluation of digital transformation initiatives for traditional banks. Navigate the regulatory landscape of fintech and banking, emphasizing compliance, security, data privacy, and ethical considerations in the context of the industry. 					
Prerequisites	None	Co-re	equisites	None		
Course Content	 The course content is developed as follows: Innovation in financial system: story and drivers Changes in consumer and business preferences: digital banking experience Big data, Artificial intelligence, and disruptive technologies in finance Supervision and regulation in Fintech, and PSD2 					









	 From open banking to open finance Embedded finance, "banking as a service" and "technology as a service" Key players in the financial ecosystem in the platform economy perspective: coopetition Neo banks and incumbents: from the Global Financial Crisis to today Fintech and Techfin Big Tech and other technology providers Other players in the Fintech arena Competitive advantages and business models Fintech, Insurtech and Regtech Payments, lending and other areas of financial services affected by innovation Blockchain, decentralised finance and cryptocurrencies 			
Teaching Methodology	Face-to-Face			
Bibliography	 FSB, Financial Stability Implications from FinTech, 2017 (available on www.fsb.org) Eba, Report On The Impact Of Fintech On Incumbent Credit Institutions' Business Models, 03 July 2018 (available on www.eba.europa.eu) J.C.Crisanto, J.Ehrentraud, M.Fabian, Big techs in finance: regulatory approaches and policy options, FSI Briefs, Financial Stability Institute, BIS, March, 2021 (available on www.bis.org) Teaching notes and other resources will be indicated and provided by lecturer in the classroom. 			
Assessment	The final mark depends on the grade got on the working group and oral exam. The working group consists in deepening a topic of the course or a case study. The project will be usually carried out by two or three students with the supervision and support of the lecturer. During the last lesson, the group must present the study, using a power point document. If the mark of the project is at least 18/30, the students take the oral exam discussing the project and answering to one or more questions on the program. The exam is written with a minimum score of 18.			
Language	English			









Course Title	Sustainable Finance and Investments					
Course Code	N/A					
Course Type	Compulsory					
Level	Master (2 nd	Cycle)				
Year / Semester	2 st Year / 1 st	Semester				
Teacher's Name	Claudio Gia	nnotti and Giov	/anni Ferri			
ECTS	6	6 Lectures / week 4 Hours / Laboratories / 10 week				
Course Purpose and Objectives	The aim of t role of the banking se sustainability understand: sustainability activities, the how all of th mission of th taxonomy, in transition.	The aim of the course is to provide knowledge and experience on the role of the financial system for sustainable development and the banking services and business models functional to promoting sustainability. At the end of the course, students will be able to understand: i) why the financial system is central to achieving sustainability; ii) the overview of the corporate and investment banking activities, the positioning of the services within the banks' business and how all of this relates to sustainable development; iii) the working and mission of the sustainable and responsible investments; iv) the role of taxonomy, information, measurements, and risks in the sustainability transition.				
Learning Outcomes	 Upon successful completion of this course students should be able to: structure complex problems; define and extract appropriate data for the analysis; design and implement basic algorithms in R; use functions from main packages to explore and visualize the data in R; build basic model to analyze the data in R. 					
Prerequisites	None Co-requisites None					
Course Content	 The course content is developed as follows: Climate and social change and sustainability background Sustainable Development Goals (SDGs), European Green Deal, Next Generation EU and sustainability transition 					









	 ESG and sustainable finance: definition and role in the SDGs perspective International and European regulatory framework on sustainable finance Corporate and Investment Banking services: positioning in the banking activities and within the SDGs Sustainable and Responsible Investments (SRI) and Sustainable Debt (Green Bonds, Social Bonds, Sustainability Bonds, Sustainability Linked Bonds) Criteria for classification of a project's sustainability, the environmental impact assessment Sustainability risks and ESG rating European Taxonomy Information as a driver of sustainable finance Non-Financial Reporting and Non-Financial Disclosure Regulation Green washing
Teaching Methodology	Face-to-Face
Bibliography	 N. Linciano, P. Soccorso, C. Guagliano, "Information As a Driver of Sustainable Finance: The European Regulatory Framework Copertina. Palgrave Studies. European Green Deal https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en Platform on Sustainable Finance https://finance.ec.europa.eu/sustainable-finance/overview-sustainable-finance/platform-sustainable-finance_en Task Force on Climate-related Financial Disclosures https://www.fsb-tcfd.org/ Teaching notes and other resources will be indicated and provided by lecturer in the classroom.
Assessment	The working group consists in studying a financial operation or a case study. The project must be usually carried out by two or three students in the classroom with the supervision and support of the lecturer, during the course, in the scheduled dates. During the last lesson









	(team work), the group must present the study, with a power point document.
	If the mark of the project is at least 18/30, the students take the oral exam discussing the project and answering one or more questions on the program.
	In some lessons, materials shall be provided in advance and discussed by students in class, to promote a critical approach to the topics.
Language	English

Course Title	Advanced Corporate Finance				
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd	Cycle)			
Year / Semester	2 st Year / 1 st	Semester			
Teacher's Name	Lucia Gibila	o and Carolina Gia	anardi		
ECTS	8	Lectures / week	2 Hours / 20 weeks	Laboratories / week	1 Hours / 20 weeks
Course Purpose and Objectives	The course aims at providing students with theoretical knowledge and practical skills on selected concepts in corporate finance oriented to creating innovative and sustainable developing patterns. Special attention will be devoted to innovative solutions for financing investments in the short and long term, by focusing on digital solutions related to working capital and real estate assets. The course provides an in-deep analysis of start up to lead the students to understand what financing options are available, with a focus on venture capital covering how it works, how to structure a deal, including a focus on the investment evaluation methodology. The course will have strong practical components, based on exercises, review of real case studies,				
Learning Outcomes	 and applications of Big Data analysis. Upon successful completion of this course students should be able to: explain the critical factors for fund raising through digital innovative solutions explain the critical factors to attract Venture Capitalist investments select among alternative digital finance solutions for short and long term financial needs 				











	 select among alternative project for a Venture Capital investment manage a portfolio of start-ups categorize corporate risks and describe risk mitigation instruments 					
Prerequisites	None Co-requisites None					
Course Content	 The course content is developed as follows: Evolution of the supply chain finance ecosystem Supply chain payments Technology driven supply chain finance solutions Supply chain finance risk management and optimization Proptech and real estate management Real estate debt and equity crowdfunding Startup Ecosystem Stages of Venture Capital Financing Structure of a Venture Capital Firm (Fund) Deal flow process Evaluation criteria for an investment Investment management 					
Teaching Methodology	Face-to-Face					
Bibliography	 Feld B., Mendelson J (Latest Edition), Venture Deals, Wiley, Hoboken Mattarocci G., Scimone X. (Latest Edition), The New Era of Real Estate, Palgrave Mcmillan, Cham Ramsinghani, M. (Latest Edition), The Business of Venture Capital (3rd ed.), Wiley, Hoboken Sufi X, (Latest Edition), Supply Chain Finance, Springer, Singapore 					
Assessment	Assignment: participation in exercises, completion and successful defence of one group projects. The exam is written with a minimum score of 18.					
Language	English					









Course Title	Ethics and Humanism in the Digital Era				
Course Code	N/A	N/A			
Course Type	Compulsory				
Level	Master (2 nd C	Cycle)			
Year / Semester	2 st Year / 1 st	Semester			
Teacher's Name	Laura Palazz	zani			
ECTS	6	Lectures / week	4 Hours / 10 weeks	Laboratories / week	
Course Purpose and Objectives	The aim of th relevance of Technologies	The aim of the course is to acquaint students with the justification and relevance of Humanism in the era of rapid development of Digital Technologies.			
Learning Outcomes	 Upon successful completion of this course students should be able to: explain the main problems and principles of digital ethics distinguish what is techno-centrism and human-centrism on a philosophical level describe ethical pluralism in the digital debate understand the justification and relevance of the human-centric perspective understand the main ethical problems of ICT, big data, algorithms, Al describe the applications in medicine, economics and law understand the documents on ethics of digital technologies 				
Prerequisites	None Co-requisites None				
Course Content	 The course content is developed as follows: Introduction to ethics applied to digital technologies Analysis of the interdisciplinary and pluralistic debate Technocentric perspective: the technological imperative Human-centrism: philosophical assumptions and justification Technological humanism: the centrality of human in the era of digital technologies The ethical risks of technological digital delegation (deskilling, dehumanization, deresponsabilization) Ethical aspects of ICT (personal identity, interpersonal relationship, digital divide) 				









	 Ethics of big data (quality of data, privacy, justice) Algor-ethics (explainability, transparency, avoidance of bias and discrimination) Ethics of AI (meaningful human control) Examples of applications of digital technologies in medicine, economics and law The role of Committees of ethics in science and new technologies Analysis of documents of experts in EU (European Commission and Council of Europe) Analysis of documents of experts on international level (OECD, UNESCO) Analysis of the existing regulation Analysis of the future regulation (guidelines and draft regulation)
Teaching Methodology	Face-to-Face
Bibliography	Compulsory literature L. PALAZZANI, Innovation in scientific research and emerging technologies: a challenge to ethics and governance, Springer Nature Switzerland AG and G. Giappichelli Editore, Cham (Switzerland). UNESCO, The ethics of Artificial Intelligence. European Group on Ethics in Science and New Technologies (EGE), Statement on Artificial Intelligence, Robotics and so called 'Autonomous' Systems. High Level Expert Group on Artificial Intelligence, Ethics Guidelines for Trustworthy AI.
Assessment	Assignment: elaboration of reports on specific topics. The exam is oral
Language	English

Course Title

Financial Risk Management









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Course Code	N/A					
Course Type	Elective					
Level	Master (2 nd (Cycle)				
Year / Semester	2 st Year / 1 st	Semester				
Teacher's Name	Stefano Bon	ini				
ECTS	4	4 Lectures / week 4 Hours / Laboratories / 10 weeks week				
Course Purpose and Objectives	10 weeksThe course introduces the fundamentals to the management of financial risks under a holistic view of the enterprise. It assumes the basics of strategy and financial management have been covered elsewhere, but builds on the identification, assessment, treatment and 					
Prerequisites	None Co-requisites None					
Course Content	 The course content is developed as follows: Introduction to banking and insurance risks (i.e. credit risk, interest rate risk, market risk, operational risk, liquidity risk, reputational risk, strategic risk, cyber risk, climate risk) Models to measure (Value at risk and expected shortfall; discriminant analysis and capital market approaches for credit risk) Stress testing Approaches and instruments to manage risks 					









	 Risk governance instruments (RAF,ICAAP, ILAAP, Recovery Plan) Capital management and value creation through sustainability Artificial intelligence and machine learning applications to manage banking and insurance risks 					
Teaching Methodology	Face-to-Face					
Bibliography	Compulsory literature					
	Bessis J Risk Management in Banking, 4th edition, Wiley, Hoboken.					
	Myint S., Famery F. The Handbook of Corporate Financial Risk Management, RiskBooks, Research and Markets, Dublin.					
	Resti A. Sironi A. Risk Management and Shareholders' Value in Banking: From Risk Measurement Models to Capital Allocation Policies, Wiley, Hoboken.					
	Recommended literature					
	Du, G., Elston, F. Financial risk assessment to improve the accuracy of financial prediction in the internet financial industry using data analytics models, Operations Management Research, 15, pp. 925–940					
Assessment	Assignment: participation in exercises, completion and successful defence of one project. The exam is written with a minimum score of 18.					
Language	English					











Course Title	Corporate Strategy and Sustainability					
Course Code	N/A	N/A				
Course Type	Elective					
Level	Master (2 nd	Cycle)				
Year / Semester	2 st Year / 1 st	Semester				
Teacher's Name	Oriana Perro	one				
ECTS	4	Lectures / week	4 Hours / 8 weeks	Laboratories / week		
Course Purpose and Objectives	This course Sustainabilit course is to responsible economic, responsibilit environment increase sus increase the impacts, and	This course aims to facilitate the students in understanding Sustainability in corporate strategies and practices. The purpose of this course is to support the learning process for students interested in responsible business conduct studies. The global scenario, at the economic, political, and social levels, focuses on companies' responsibilities in managing the business activities impacts on the environment and society. The ambition for companies should be to increase sustainability performances, archive competitive advantages, increase the total companies' value, prevent risks in terms of negative impacts, and generate benefits for all.				
Learning Outcomes	 Upon successful completion of this course, students should be able to: examine Sustainability as a system of interdependent concepts derived from communication, management, and the social sciences analyze Sustainability conceptual foundations in contemporary businesses and organizations understand the practicalities of economic and social responsibility, and play a role in shaping responsible businesses 					
Prerequisites	None Co-requisites None					
Course Content	 The course content is developed as follows: an overview of the evolution of Sustainability at the global level and the implications in corporate strategy and business practices. an overview of the international guidelines, frameworks, and principles for MNCs and SMEs to drive Sustainability into the business models and to archive competitive advantages creating value also for the local communities and safeguarding the environment and social rights; 					









	 knowledge of the mechanisms and procedures to integrate Sustainability into the business models according to the Agenda 2030 and the SDGs, the most recent EU Directives and norms, OECD Guideline, and UN Principles); skills to set out a sustainability strategy that suits the requirements of core stakeholders; understanding of the complexity of implementing responsible business conduct in real corporate life (mandatory and voluntary strategies and approaches); adoption of specific terminology in the debate around Sustainability at the institutional and company levels; improvement of critical thinking and analytical skills.
Teaching Methodology	Face-to-Face
Bibliography	 Required readings: "Corporate Social Responsibility", McWilliams A., Oxford Research Encyclopedias, Business and Management, Online Publication Feb 2020 DOI: 10.1093/acrefore/9780190224851.013.12 - "Corporate Social Responsibility", Blowfield M .and Murray A., Oxford University Press. (Freeman, R. E.), "Strategic Management: a stakeholder approach." Cambridge University Press. Michael E. Porter and Mark R. Kramer "Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility", Harvard Business Review. 84 (12), 78-92 Porter, M.E "Creating Shared Value",. Harvard Business Review, 89(1/2): 62-77, 2011 Optional readings: "Corporate Social Responsibility", McWilliams A., Oxford Research Encyclopedias, Business and Management, Online Publication Feb 2020 DOI: 10.1093/acrefore/9780190224851.013.12 Corporate Social Responsibility, Blowfield M .and Murray A., Oxford University Press, 2019, ISBN: 9780198797753. Also available as Ebook "European Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A renewed EU strategy 2011-14 for Corporate Social Responsibility Communication of the European Commission", Brussels, COM (2011) 681, EU COMM, 2011 OECD Guidelines for Multinational Enterprises, OECD Publishing, 2011, http://dx.doi.org/10.1787/9789264115415-en ISBN 978-92-64-11528-6 (print) ISBN 978-92-64-11541-5 (PDF)









	 "Integrated Reporting Quality, an empirical analysis", Pistoni A, Songini L., Bavagnoli F., Corporate Social Responsibility and Environmental Management Journal, 2018, Volume25, Issue4, Pages 489 – 507 Directive 2014/95/EU, https://ec.europa.eu/info/business- economyeuro/company-reporting-and-auditing/company- reporting/non-financialreporting_en "The New Political Role of Business in a Globalized World: A Review of a New Perspective on CSR and its Implications for the Firm, Governance, and Democracy." Journal of Management Studies, 48(4): 899-931, 2011 (Scherer A.G., Palazzo G.) "The Path to Corporate Responsibility," Harvard Business Review (December 2004), (Simon Zadeck) "The how and why of a firm's approach to CSR and sustainability: a case study of a large European company", Songini L., Pistoni A, Perrone O., Journal of Management and Governance, ISSN 1385- 3457 Volume 20, No. 3, Springer 2016 - ISSN: 1572-963X, online publication 2015 "The SDGS in the reports of the Italian companies", research document n.16, Venturelli A., Minoja M., Perrone O. et al., (GBS), Franco Angeli, 2019, ISBN 9788891797537 "Corporate Social Responsibility and Human Rights Abuses. A comparison of the Strategies adopted by Advanced Country and BRIC Multinationals", Giuliani E, Perrone O. et al., Politeia p.34-54, v.106, 2012 - "Leading Sustainable Change, An Organizational Perspective", (Edited by Rebecca Henderson, Ranjay Gulati, and Michael Tushman), Oxford University Press, 2015
Assessment	 Assignment: business case analysis (presentation) and the essay Midterm test: short-answer questions Final exam: it will consist of an oral exam on theoretical and practical issues concerning the course program. The students should contribute regularly and productively to class discussions and activities
Language	English









Course Title	Integrity and Ethics in Finance				
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd	Cycle)			
Year / Semester	2 nd Year / 1 st Semester				
Teacher's Name	Dr. Deimant	ė Vasiliauskaitė			
ECTS	5	Lectures / week	4 Hours / 4 weeks	Laboratories / week	4 Hours / 4 weeks
Course Purpose and Objectives	The purpose of the course is to provide students with theoretical and practical knowledge in integrity and ethics in finance, to introduce students to ethics, related challenges to ethical behaviour, the role played by ethics in the investment profession, and the framework of the ethical decision-making process. The course has the aim to familiarize students with the CFA Institute Code of Ethics and Standards of Professional Conduct, the Global Investment Performance Standards, CFA Institute Research Objectivity Standards, and the Asset Manager Code. The course has the purpose of helping students to identify and resolve ethical conflicts.				
Outcomes	 explain the concept of financial ethics and will be able to apply the knowledge in practice by using the framework of the ethical decision-making process; disclose ethical problems, identify challenges to ethical behaviour and their origins and propose ethical solutions to such problems; know the main role of the CFA Institute in financial ethics and will be familiar with the CFA Institute Code of Ethics and Standards of Professional Conduct, the Global Investment Performance Standards, CFA Institute Research Objectivity Standards, and the Asset Manager Code; will be able to apply them to situations involving issues of professional integrity and other specific situations; evaluate trade allocation practices and determine whether they comply with the CFA Institute Standards of Professional Conduct; and to identify the appropriate actions to take in response to trade allocation practices that do not adequately respect client interests. 				
Prerequisites	None Co-requisites None				









Course Content	 The course content is developed as follows: 1. Ethics and trust in the investment profession. 2. Code of ethics and standards of professional conduct. Understanding the code of ethics. Standards of professional conduct: professionalism, the integrity of capital markets, duties to clients, duties to employers, investment analysis, recommendations and actions, conflicts of interest, responsibilities as a CFA Institute member or CFA candidate. 3. Introduction to the Global Investment Performance Standards (GIPS ®). Provisions of the global investment performance standards: fundamentals of compliance, input data, calculation methodology, composite construction, disclosure, presentation and reporting, real estate, private equity, wrap fee/separately managed account (SMA) portfolios. 4. CFA Institute Research Objectivity Standards. 5. Asset Manager Code of Professional Conduct.
Teaching Methodology	Face-to-Face
Bibliography	Compulsory literature CFA Institute (2022). Code of Ethics and Standards of Professional Conduct. https://www.cfainstitute.org/-/media/documents/code/code- ethics-standards/code-of-ethics-standards-professional-conduct.pdf CFA Institute (2017). Ethics and the Investment Industry. https://www.cfainstitute.org/en/ethics-standards/codes/standards-of- practice-guidance/ethics-and-investement-industry CFA Institute (2014). Standards of Practice Handbook. https://www.cfainstitute.org/-/media/documents/code/code-ethics- standards/standards-practice-handbook-11th-ed-eff-July-2014-corr- sept-2014.pdf CFA Institute (2020). Introduction to the Global Investment Performance Standards (GIPS). <u>https://www.cfainstitute.org/en/ethics- standards/codes/gips-standards</u> CFA Institute (2019). Ethics in practice. Ethics in Investment Management Casebook. <u>https://www.cfainstitute.org/- /media/documents/ethics-in-practice/ethics-in-practice-casebook-2nd- edition-web.pdf</u> CFA Institute (2020). CFA Institute Research Objectivity Standards. https://www.cfainstitute.org/-/media/documents/code/other-codes- standards/read-research-objectivity-standards.ashx CFA Institute (2020). Asset Manager Code of Professional Conduct. https://www.cfainstitute.org/-/media/documents/code/amc/asset- manager-code.ashx Recommended literature Judy Zhu (2014) The Value of Financial Ethics, Part I. https://sevenpillarsinstitute.org/value-of-financial-ethics/









	Julia Black, Karen Anderson (2013). C the financial https://www.lse.ac.uk/law/people/acad	reating an ethica services emic-staff/iulia-	I framework for industry.	
	black/Documents/black10.pdf			
Assessment	Examinations Assignments Class Participation and Attendance	60% 30% 10% 100%		
Language	English			











Course Title	Behavioural Finance for Sustainable Development				
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd	Cycle)			
Year / Semester	2 nd Year / 1 st Semester				
Teacher's Name	Dr. Tom Has	shimoto			
ECTS	5	Lectures / week	4 Hours / 4 weeks	Laboratories / week	4 Hours / 4 weeks
Course Purpose and Objectives	This course is generally in line with the learning framework of CFA (chartered financial analyst) Portfolio Management (Levels 1 and 3) topic. While the materials covered in this course follow the 'readings' of CFA, additional insights from economic analysis of law, institutional economics, and personal finance provide the theoretical and practical relevance of behavioural finance with respect to financial economics in general. Paying attention to the CFA Code of Ethics and the relevant EU rules and regulations (e.g. MiFID II, SFDR), we ask how financial professionals can detect and overcome various biases not only for themselves but also for their clients. Therefore, this course is also relevant for future regulators and policymakers. Furthermore, this course is modified to address issues related to sustainable development in the sense that we also trace the evidence of subary and policymation is an ergonal in the sense that we also trace the evidence of subary and policymation is the sense that we also trace the evidence of subary and the professional in the sense that we also trace the evidence of subary and the professional in the sense that we also trace the evidence of subary and the professional in the sense that we also trace the evidence of subary and policymakers.				
Learning Outcomes	 Upon successful completion of this course students should be able to: illustrate how various biases influence our financial decision-making in a holistic manner; analyse how our behavioural patterns shape financial markets (and crises) in the past decade; assess the role of professional financial advisors in overcoming various biases, especially paying attention to international ethical rules and standards (such as the CFA Code of Ethics and EU regulations). 				
Prerequisites	None	Co-re	equisites	None	
Course Content	 The course content is developed as follows: 1. Introductory discussion: Modern Portfolio Theory and Behavioural Biases. 2. Cognitive Errors and the role of institutions. 3. Emotional Biases and the role of (Social) Media. 				









	 Investor Personality Types and their criticisms. Adviser-client relations and Portfolio Management from the behavioural perspectives. The rise of 'green investment': case study. Sustainable behaviours? The issue of 'green washing'. 		
Teaching Methodology	Face-to-Face		
Bibliography	Compulsory literature CFA Institute (2023). CFA Portfolio Management reading. <u>www.cfainstitute.org</u> (CFA available to members; relevant material is provided during the lectures). Recommended literature Cartwright, E. (2014) Behavioural Economics, second edition. Routledge. Kahneman, D. (2011). Thinking, Fast and Slow, Penguin.		
Assessment	Examinations Assignments	60% 40% 100%	
Language	English		










Course Title	Technical Analysis of Financial Markets				
Course Code	N/A	N/A			
Course Type	Compulsory	Compulsory			
Level	Master (2 nd (Cycle)			
Year / Semester	2 nd Year / 1 ^s	^t Semester			
Teacher's Name	Dr. Greta Ke	eliuotytė-Staniulėnio	enė		
ECTS	5	Lectures / week	5 Hours / 4 weeks	Laboratories / week	3 Hours / 4 weeks
Course Purpose and Objectives	The purpose of the course is to provide students with theoretical knowledge as well as the practical skills of technical analysis of financial markets necessary for the analysis and evaluation of the possible investment strategies in global economic conditions.				
Learning Outcomes	 Upon successful completion of this course students should be able to: Define and distinguish between different tools of technical analysis, understand and discuss their purposes and controversies related to their application in financial markets; Apply different tools of technical analysis on selected financial markets/instruments, to interpret the results, and, based on them, to make investment decisions, and provide investment recommendations; Purposefully increase the theoretical and practical knowledge on the issues of technical analysis of financial markets, and to develop the abilities and skills necessary for the job. 				
Prerequisites	None	Co-re	equisites	None	
Course Content	 The course content is developed as follows: Introduction to technical analysis. Objective and function of technical analysis. Classifying technical analysis. Main assumptions of technical analysis. Technical analysis controversy. Technical vs fundamental analysis. Dow theory. Origins of Dow theory. Assumptions of Dow theory. Challenges and criticisms of Dow theory. Charting. Mechanics and dynamics of charting. Data needed to construct a chart. Constant chart measures. Line charts. Bar charts. Candlestick charts. Point-and-figure charts. Arithmetic vs logarithmic scale. Gap action. Elements of chart pattern analysis. Popular chart patterns. 				







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	 Market phase analysis. Market phase according to Dow theory. Interpretations of market phase: chart pattern, volume, open interest, moving average, divergence and momentum, sentiment, etc. Overlay indicators and window oscillators. Definition of indicators and oscillators. Overlay indicators: moving averages, support and resistance levels, trendlines, channels, chart patterns, etc. Oscillators: stochastics, RSI, ATR, ADX, MACD, ROC, CCI, ADL, MOM, etc. Trend analysis. Definitions of trend. Characteristics of trend quality. Price inflection points. Trendlines, channels, trend retracements, gaps, and trends. Trend directionality. Moving averages. Components of moving averages. Application of moving averages. SMA, LWMA, EMA, VWMA, KAMA, MAMA, FAMA, etc. Methods of price containment. Volatility around a central value. Methods of price containment. Bands and envelopes. Bollinger bands, Keltner bands, Starch bands, etc. Linear regression channels, downtrending and uptrending channels, etc. 		
Teaching Methodology	Face-to-Face		
Bibliography	Compulsory literature Kirkpatrick, Ch. D., Dahlquist, J. R. (Latest Edition). Technical Analysis: The Complete Resource for Financial Market Technicians. 3 rd edition; Pearson Education, Incorporated. 736 p. CFA Institute (2023). CFA readings: Technical analysis. <u>https://www.cfainstitute.org/</u> (available to members; relevant material is provided during the lectures). Scott, G.; Carr, M., Cremonie, M. (Latest Edition). Technical Analysis: Modern Perspectives. The CFA Institute Research Foundation. 45 p. Recommended literature Grimes, A. H. (Latest Edition). The Art and Science of Technical Analysis: Market Structure, Price Action, and Trading Strategies. 3rd edition. J. Wiley & Sons, Inc. New Jersey (USA). 480 p. Special issue "Technical analysis of financial markets". Journal of Risk and Financial management, 2023. MDPI (Basel, Switzerland); <u>https://www.mdpi.com/journal/jrfm/special_issues/Technical_Analysis</u> : Aronson, D. (Latest Edition). Evidence-Based Technical Analysis: Applying the Scientific Method and Statistical Inference to Trading Signals, J. Wiley & Sons, Inc. New Jersey (USA). 544 p.		
Assessment	Examinations60%Assignments40%100%		









Language

Course Title	Investing for Environmental and Social Impact				
Course Code	N/A				
Course Type	Compulsory				
Level	Master (2 nd (Cycle)			
Year / Semester	2 nd Year / 1 ^s	^t Semester			
Teacher's Name	Prof. Dr. Jel	ena Stankevičienė			
ECTS	5 Lectures / week 5 Hours / Laboratories / 3 Hours 4 weeks				3 Hours / 4 weeks
Course Purpose and Objectives	The purpose of the course is to provide the theoretical knowledge and practical skills necessary the better understanding how investment mechanisms can be structured to solve critical social and environmental challenges and be well-positioned to work in the expanding impact investing industry				
Learning Outcomes	 Upon successful completion of this course students should be able to: properly apply key the concepts, frameworks and models to source, analyse and fund impact investments across asset classes and impact themes and lenses; apply the theoretical basis for impact investing, e.g., externalities, systems analysis, market failures, shared value and blended value investing; analyse the effectiveness of impact investing tools and structures available to impact investors; map impact investing opportunities against existing product offerings and explore the gaps; understand the segmentation and distinct roles of specific impact investors: institutional (pension funds, foundations and endowments), corporations, public sector (multi-laterals, federal, state, local), high net-worth and family offices, and retail investors: 				
Prerequisites	None	Co-re	equisites	None	
Course Content	 The course content is developed as follows: 1. Introduction and Overview: definitions, classical finance and the case for impact investing. History, size and characteristics of the impact investing, ESG, sustainability marketplace. 				









	 Market participants and stakeholders across the impact capital chain. Shareholder activism: positive and negative investment. Socially responsible investing: negative screening, positive screening, the fiduciary standard revisited. Investment goals defining impact, theories of change. Bridging theory of change and portfolio construction. Impact theme: environmental finance, ecosystem services, development finance and access to financial services, climate risk, fossil fuel divestment. Impact tools: integrating ESG into the investment process, standards and reporting. Impact Measurement and Management. Structuring impact investments, venture capital and private equity, innovative tools and structures to drive impact Due diligence process and impact investment advisor selection. Innovations in impact investing, environmental finance, Greentech, infrastructure.
Teaching Methodology	Face-to-Face
Bibliography	Compulsory literature Briaud, P. Impact investing handbook: An implementation guide for practitioners. Rockefeller Philanthropy Advisors. Cole, S., Gandhi, V., Brumme, C.R. and Harmani, M. Background note: Introduction to investing for impact. Harvard Business School. Global Impact Investing Network. Core Characteristics of Impact Investing. <u>https://thegiin.org/characteristics/</u> Cohen, R. Impact: Reshaping capitalism to drive real change. Random House. Bodie Z., Kane A., Marcus A. J. Essentials of investments. McGraw- Hill/Irwin. Recommended literature European Commission (EC) Directorate-General for Regional and Urban policy (Latest Edition). Guide to Cost-Benefit Analysis of Investment Projects Economic appraisal tool for Cohesion Policy 2014- 2020. <u>https://ec.europa.eu/inea/sites/inea/files/cba_guide_cohesion_policy.p</u> <u>df</u> Pearce D., Atkinson G., Mourato S. (Latest Edition). Cost-Benefit Analysis and the Environment Recent Developments. OECD Publishing <u>https://dx.doi.org/10.1787/9789264010055-en</u> Larson, E. W.; Gray Cl. F. (Latest Edition). Project management. The Managerial Process. Fifth ed. McGraw-Hill. Brigham E.F., Houston J. (Latest Edition). Fundamentals of Financial Management. Cengage Learning.









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	Social Impact Investment https://socialimpactinvestment.or	online <u>g/</u>	education	platform.
Assessment	Examinations Self-control exercises	90% 10% 100%		
Language	English			









Vilnius University



Course Title	Financial Technologies and Alternative Investments				
Course Code	N/A	N/A			
Course Type	Compulsory				
Level	Master (2 nd	Cycle)			
Year / Semester	2 nd Year / 1 ^s	^t Semester			
Teacher's Name	Prof. Dr. Alfr	eda Šapkauskienė)		
ECTS	5	Lectures / week	5 Hours / 4 weeks	Laboratories / week	3 Hours / 4 weeks
Course Purpose and Objectives	The purpose knowledge of strategies to regulations banking, ass Upon succes • under finance • acqui risks; • acqui the co • acqui dynar finance • to ind risk m inform • to pro- in th disad	 5 Lectures / week 5 Hours / 4 weeks 4 weeks 4 weeks The purpose of the course is to acquire both theoretical and practical knowledge on financial technologies, including frameworks for effective strategies to tackle the disruption driven by rapid innovation and new regulations in the industry; changes in multiple domains such as banking, asset management, payments, cryptocurrencies, and trading. Upon successful completion of this course students should be able to: understand and properly evaluate the most important trends in financial technology; acquire the ability to independently analyze financial technology risks; acquire the ability to comment on the possible impact of the dynamics of financial technologies on the results of business financial activities and overall economic growth; to independently search for information on financial technology risk management issues and will be able to analyze the received information; to propose solutions for the application of financial technologies in the financial sector and discuss their advantages and disadvantages 			d practical or effective n and new s such as <u>nd trading.</u> be able to: nt trends in technology d issues in bact of the f business technology ne received chnologies tages and
Prerequisites	None	Co-re	equisites	None	
Course Content	 The course content is developed as follows: 1. Introductory lecture: course presentation. Introduction to Financial Technology. An introduction to the current fintech ecosystem: near-term opportunities and long-term trends in fintech innovation. 2. Tools for innovation: the problem of choosing the right tools. 				











	 The Future of Money: Uncovering the Future of Money and Analysing the Macroeconomic Factors Affecting Financial Innovation and Alternative Investments. The future of financial markets: analysis of the impact of financial innovations on markets and assessment of business strategy. The future of market infrastructure: the added value of financial innovation or the disruption of the system. Infrastructure and regulatory technologies: the relationship between infrastructure, the regulatory environment and financial technology innovation. Real estate technologies and innovations: opportunities and perspectives. Fintech Frontiers: Reflections on Future Technologies and the Future of Financial Services.
Teaching Methodology	Face-to-Face
Bibliography	Compulsory literature Pentland, A., Rabbe, L., Tufano P. (2019). "Oxford Fintech programme" material. University of Oxford. Financial Times (The newest information). <u>http://www.ft.com</u> Bank of Lithuania (The newest information). Publications of the Bank of Lithuania and other information. <u>http://www.lb.lt</u> Recommended literature Lee, D. K. C., Low, L. Inclusive Fintech: Blockchain, Cryptocurrency and ICO. Chishti, S., Puschmann, T. The Wealthtech Book: The Fintech Handbook for Investors, Entrepreneurs and Finance Visionaries. Bloomberg News (The newest information). <u>https://www.bloomberg.com</u> The International Monetary Fund (The newest information). <u>http://www.imf.org</u> The European Central Bank (The newest information). <u>https://www.ecb.europa.eu/home/html/index.en.html</u>
Assessment	Examinations60%Assigments40%100%
Language	English









Course Title	Equity Securities			
Course Code	N/A			
Course Type	Elective			
Level	Master (2 nd Cycle)			
Year / Semester	2 nd Year / 1 st Semester			
Teacher's Name	Prof. Dr. Rasa Kanapickienė			
ECTS	5 Lectures / week 5 Hours / Laboratories / 3 Hours / 4 weeks week 4 weeks			
Course Purpose and Objectives	The purpose of this course is to acquire theoretical and practical knowledge allowing the student to analyse and evaluate equity securities using appropriate valuation concepts and techniques and to estimate risk and expected return of equities in the global context			
Learning Outcomes	 Upon successful completion of this course students should be able to: understand the significance of investment, its logic, consistency, and opportunities; the ability to assess the effectiveness of various types of equity securities; analyse and assess the risk of various types of equity securities; apply mathematical methods to the assessment of investment alternatives, to draw conclusions, and to take justified investment decisions; analyse an investment problem and provide potential ways of its solution. 			
Prerequisites	None Co-requisites None			
Course Content	 The course content is developed as follows: 1. Equity Valuation: Applications and Processes. Value definitions and valuation applications. The valuation process. Communicating valuation results. 2. Return concepts. Return concepts: Holding period return; Realized and expected (holding period) return; Required return; Expected return estimates from intrinsic value estimates; Discount rate; Internal rate of return. The equity risk premium. The required return on equity. The weighted average cost of capital. Discount rate selection in relation to cash flows. 3. Industry and Company Analysis. Financial modelling: Modelling of Income statement, Balance sheet and Cash flow statement; Scenario analysis and sensitivity analysis. The impact of competitive factors on prices and costs. Sales and cost 			









	 projections with inflation and deflation. Technological developments. Long-term forecasting. Building a model: Industry overview; Company overview; Construction of pro forma Income statement, Cash flow statement and Balance sheet; Valuation inputs. 4. Discounted Dividend Valuation. Present value models. The dividend discount model. The Gordon growth model. Multistage dividend discount models: Two-stage dividend discount model; Valuing a non-dividend paying company; The H-model; Three-stage dividend discount models; Spreadsheet (general) modelling; Estimating a required return using any DDM. The financial determinants of growth rates: Sustainable growth rate; Dividend growth rate, retention rate, and ROE analysis; Financial models and dividends. 5. Free Cash Flow Valuation. FCFF and FCFE Valuation Approaches: Present Value of Free Cash Flow; Single-Stage (Constant-Growth) FCFF and FCFE Models. Forecasting Free Cash Flow. Free Cash Flow Model Variations: An International Application of the Single-Stage Model; Sensitivity Analysis of FCFF and FCFE Valuations; Two-Stage Free Cash Flow Models; Three-Stage Growth Models. Nonoperating Assets and Firm Value. 6. Market-Based Valuation: Price and Enterprise Value Multiples. Price and enterprise value multiples in valuation.
	 considerations when using multiples. Momentum valuation indicators. 7. Residual Income Valuation. Residual income: The use of residual income in equity valuation; Commercial implementations. The residual income model: The general residual income model; Fundamental determinants of residual income; Single-stage residual income valuation; Multistage residual income valuation. Residual income valuation in relation to other approaches. Accounting and international considerations. 8. Private Company Valuation. The scope of private company valuation. Definitions (standards) of value. Private company valuation approaches: Earnings normalization and cash flow estimation issues; Income approach methods of private company valuation; Market approach to private company valuation; Valuation discounts and premiums; Business valuation standards and practices.
Teaching Methodology	Face-to-Face









Bibliography	CFA Institute (2017). Equity. CFA Program Curriculum. Volume 4. Level 2. Pearson Publishing. Damodaran, Aswath Investment Valuation: Tools and Techniques for Determining the Value of Any. Hoboken [N.Y.]: J. Wiley Recommended literature Bodie, Zvi; Kane, Alex; Marcus, Lan. Essentials of Investments. New York [N.Y.]: McGraw- Hill. Research Articles from Journal of Finance, Financial Markets, Institutions and Instruments, Journal of Business, Journal of Money, Credit and Banking, Oxford Economic Papers, Finance and Development. The Economist.		
Assessment	Classroom work Project Examinations	20% 30% 50% 100%	
Language	English		











Course Title	Investment Portfolio Analysis					
Course Code	N/A					
Course Type	Elective					
Level	Master (2 nd (Cycle)				
Year / Semester	2 nd Year / 1 ^s	^t Semester				
Teacher's Name	Assoc. Prof.	Antanas Lauri	inavi	čius		
ECTS	5	Lectures / we	ek	5 Hours / 4 weeks	Laboratories / week	3 Hours / 4 weeks
Course Purpose and Objectives	The purpose of this course is to acquire both theoretical and practical knowledge on investment portfolio analysis, including portfolio theory, market models and advanced portfolio management, portfolio performance evaluation methods. Such issues as integrating various types of assets in a portfolio, managing portfolio for different types of investors, estimating return and risk of selected portfolio, as well as using a number of asset allocation approaches, are spanned by the course material.					
Learning Outcomes	 Upon successful completion of this course students should be able to: apply the principal models of the building of an investment portfolio, as well as the financial theories, and financial behaviour; analyse the risk of an investment portfolio when taking decisions on investment; perform asset selection and construct a portfolio suiting the investment horizon and preference structure of an investor; calculate return and estimate expected return and risk of a portfolio; apply main market equilibrium models in portfolio management; apply some chosen portfolio-performance evaluation methods; list and comment on main elements and stages of portfolio management process for an individual and institutional investor; list, comment on asset allocation strategies, as well as propose one in some chosen model cases; conduct scientific research by working independently or in group and to present the obtained results to the audience. 					
Prerequisites	None	C	Co-re	quisites	None	
Course Content	The course content is developed as follows:					









	 Portfolio and risk management- an overview. The portfolio approach to investing. Types of investors. Defined contribution and defined benefit pension plans. The steps in the portfolio management process. Mutual funds and other pooled investment products. Risk management. Financial and non-financial sources of risk. Methods for measuring and modifying risk exposures. Portfolio risk and return. Return measures. Characteristics of the major asset classes. The mean, variance, and covariance (or correlation) of asset returns. Risk aversion. Portfolio standard deviation. The effect on a portfolio's risk of investing in assets that are less than perfectly correlated. The minimum-variance and efficient frontiers of risky assets and the global minimum-variance portfolio. The selection of an optimal portfolio, given an investor's utility (or risk aversion) and the capital allocation line. Market Equilibrium Models. The implications of combining a risk-free asset with a portfolio of risky assets, the capital market line (CML). Systematic and non-systematic risk. Return generating models (including the market model). Beta. The capital asset pricing model (CAPM). Arbitrage pricing theory (APT). The Sharpe ratio, Treynor ratio, M2, and Jensen's alpha, tracking error and the information ratio. Basics of portfolio planning and construction. The reasons for a written investment policy statement (IPS). The major components of an IPS. Risk and return objectives and how they may be developed for a client. The willingness and the ability (capacity) to take risk in risk tolerance. The specification of asset classes in relation to asset allocation. The principles of portfolio construction and the role of asset allocation in relation to the IPS. Measuring and managing market risk. Value at risk (VaR) in measuring portfolio risk. The parametric (variance-covariance), historical simulation, and Monte Carlo simulation methods for estimating VAR. Advantages and limitations o
Teaching Methodology	Face-to-Face
Bibliography	Compulsory literature CFA Institute (2023). Reading "Portfolio Management" (Levels II and III). <u>https://www.cfainstitute.org/</u> (available to members; relevant material is provided during the lectures).











	 Maginn, J. L., Tuttle, D. L., McLeavey Investment Portfolios. A Dynamic Proc (New Jersey). Pickford, J. Mastering Investment. Pre- Hull, J. C. Risk Management and Fir Wiley Finance. Reilly F.K., Brown K.C. Investm Management. South-Western - Thoms Recommended literature Pompian, M. M. (Latest Edition). Be Management. Wiley: New Jersey. Jones, Ch. P. (Latest Edition). Be Management. 12th Edition. John Wiley Jordan, Bradford D., Miller Jr., Thoma Edition). Fundamentals of Investment 7th Edition. McGraw-Hill Education. Elton E. J., Gruber M. J., Brown S. Edition). Modern Portfolio Theory ar Hoboken (New Jersey). 	 y, D. W., Pinto, J. E. Managing cess. 3rd Edition. Wiley Hoboken ntice Hall Financial Time. nancial Institutions. 4th Edition. Institutions. 4th Edition. Analysis and Portfolio con Learning. ehavioral Finance and Wealth Investments: Analysis and V & Sons, Inc. Is W., Dolvin, Steven D. (Latest is: Valuation and Management. J., Goetzmann W. N. (Latest ind Investment Analysis. Wiley
Assessment	Examinations Assigment	75% 25% 100%
Language	English	









Course Title	Master Diploma ThesIs		
Course Code	N/A		
Course Type	Compulsory		
Level	Master (2 nd Cycle)		
Year / Semester	2 nd Year / 4 th Semester		
Teacher's Name	ТВА		
ECTS	30 Lectures / week Up to 5 Laboratories / None week		
Course Purpose and Objectives	The course's purpose is to provide guidance on how to write a successful Master's Thesis. It aims to provide skills in research methods in the subdiscipline of Finance. Students will be able to demonstrate the ability to identify and formulate issues critically, independently and creatively as well as to plan and use appropriate methods, undertake advanced tasks within predetermined timeframes, and to contribute to the formation of knowledge in the field. Other skills will be related to participation in research and development work in the field of data analytics and sustainable finance, which is considered the main part of the thesis. The course also aims to equip the student with the tools required to manage a project as large as a Master's Thesis, through providing project management techniques. The Master's Thesis course includes research methods stages of reviewing related work, extending existing or developing new ideas, software implementation and testing, analysis and evaluation, and finally writing a Master's Thesis. Finally, it aims to prepare the student for independent work as a recipient of a Master's degree.		
Learning Outcomes	 Upon successful completion of this course students should be able to: Be aware of their responsibilities as research students, including scientific ethics, and data and code management requirements. Communicate research results, including building a scientific argument orally and in writing in the subdiscipline of Artificial Intelligence. Data exploration and statistical analysis of data with the use of statistical tools and probability calculations. Select and justify a research topic and use various resources to carry out a literature search and review in the subdiscipline of Sustainable finance. Identify real-world problems in the subdiscipline of Artificial Intelligence to which academic concepts and methods can be realistically applied to improve or resolve the problem situation. 		









	 Select and use effectively the methods and techniques appropriate for particular cases in the subdiscipline of Artificial Intelligence, and plan and manage their work. 		
Prerequisites	The student needs to have completed all core courses of the programme.	Co-requisites	None
Course Content	The investigation will invo an evaluation of the litera status for management thesis will require studen methodologies and to eva of the research process. A major aim of the t collaboratively and auto organization and in some at a professional level. integrative and strategic advanced understanding processes, the strategic theory toward the advand Students will be expected knowledge and understan • Use and exploitatio • Use of relevant co • Development of ag meet stakeholder • Critical thinking an • Problem solving at • Scanning and org diverse sources • Use of quantitative • Communication in • Personal effective reflection on practio • Effective performa • working with and a • Ability to conduct of practice The thesis report will req 15,000 to 20,000 words of a literature review, de	olve a thorough litera ature and developm practice and furthe ts to develop and a aluate the appropria hesis is to encou- onomously with re- cases implementation The Project/Disser . Students will be of organizations, external context and cement of managem ed to draw on the nding: on of information and mmunication techni- opropriate business needs and creativity and decision making ganizing data and a e data a range of media eness and interp- ice and experience ince with clients and applying ethical and research and develop- uire students to pro- excluding appendice scription and evaluation	ature review together with hent of conclusions of the er research activity. The pply appropriate research ateness and effectiveness urage students to work espect to the planning, ion of an advanced project tation is designed to be expected to demonstrate markets, capabilities and hd a critical application of hent practice. following sources skills, ad evaluation of options ques policies and strategies to abstracting meaning from hersonal skills including d teams organizational values op workable management aduce a report of between es. The report will contain luation of the research
		on the research, at	i option appraisar and iun









	conclusions and recommendations considering the implications for further study but importantly a management report section detailing the main findings from the organizational/sectional analysis.	
Teaching Methodology	Face-to-Face	
Bibliography	There is no text for the course but students will be using a thesis manual, which will be provided by the instructor.	
Assessment	Written Thesis Presentation	70% 30% 100%
Language	English	









Appendix 6 Supportive Letters from Industry

Dear Dr. Pieris Chourides, Dean of the School of Business,

I am writing on behalf of Jinius Ltd, a leading organization driving the digital economy of Cyprus, with a keen interest in establishing a collaboration with European University Cyprus regarding the upcoming MSc in Financial Data Analytics and Sustainable Finance program.

We have been following the development of this program with great enthusiasm and believe that it will play a pivotal role in shaping the future leaders in the fields of financial data analytics and sustainable finance. The unique combination of cutting-edge analytics and a sustainability focus aligns seamlessly with the values and objectives of our organization.

As a company committed to innovation and sustainability, we recognize the immense potential in the graduates of this program to contribute to our team. The skills and knowledge imparted through your curriculum are precisely what we seek in candidates to address the evolving challenges in our industry.

We are open to discussing potential collaborations, such as internship programs or joint initiatives, that would not only benefit our organization but also provide valuable practical experiences for the students.

We look forward to the opportunity to engage in further discussions with the university to formalize our commitment to hiring graduates from the MSc in Financial Data Analytics and Sustainable Finance program. Please let us know the appropriate channels and procedures for pursuing this collaboration.

Thank you for considering our proposition. We are excited about the prospect of working closely with European University Cyprus and contributing to the success of your esteemed program.

Sincerely,

The

Panayiotis Tembriotis Chief Technology Officer





13th of February 2024

Dean of the School of Business, Dear Dr., Pieris Chourides,

I am writing to you on behalf of Stalworth Pro Ltd, a leading organization in financial advisory services.

We have been closely monitoring the development of the forthcoming MSc in Financial Data Analytics and Sustainable Finance program at the European University Cyprus with great enthusiasm. It is evident that this program is meticulously crafted to meet the evolving demands of the market, blending cutting-edge analytics with a strong emphasis on sustainability.

As a forward-thinking company, we acknowledge the immense value of fostering talent equipped with the skills and knowledge provided by this program. The convergence of financial data analytics and sustainable finance is progressively emerging as a focal point in our industry, and we are confident that graduates from this program will be aptly positioned to spearhead innovation and tackle the pressing challenges confronting our sector.

Warm regards,

Demos Kleovoulou

LWORTH P

Managing Director









126 Giannou Kranidioti Avenue, Latsia Business Centre, 3rd Floor Latsia 2235 Nicosia, Cyprus email: info@stalworthpro.com web: www.stalworthpro.com t: +357 22 270 803 f: +357 22 270 834

Non-Binding Expression of Interest

Dear Dr. Pieris Chourides, Dean of the School of Business,

I am contacting you on behalf of the London Stock Exchange Group to convey our interest in consolidating our partnership with the European University Cyprus for the upcoming MSc in Financial Data Analytics and Sustainable Finance program.

Our organization has been closely monitoring the development of this program, recognizing its potential to shape future leaders in financial data analytics and sustainable finance. The program's distinctive combination of cutting-edge analytics and a sustainability focus aligns seamlessly with the values and objectives of our company.

As a company deeply committed to innovation and sustainability, we acknowledge the significant potential of the program's graduates. The skills and knowledge imparted through your curriculum precisely align with the qualities we seek in candidates to address the evolving challenges in our industry.

We are open to discussing potential collaborations, such as financial education, guest lectures and competitions, that would mutually benefit both our organizations and provide valuable practical experiences for the students.

We look forward to contributing to the success of your esteemed program and its potential to increase our cooperation.

Best regards,

George Srour

Appendix 7 - PER Procedure



Program Evaluation Review (PER) Procedures and Templates

December 2018

Program Evaluation Review (PER) Procedures

1. Rationale and Scope

The Program Evaluation Review (PER) encourages excellence in academic programs by aligning teaching and learning, curriculum, and other academic processes and activities with the mission of individual programs. The process is an essential part of EUC's continued effort to ensure that its mission is met through the delivery of its programs, that EUC programs of study comply, on institutional level, with Standards and Guidelines in the European Higher Education Area, and that EUC programs' structure, content and delivery mode meet stakeholders expectations and needs.

More specifically, the PER's goal is to provide a framework for developing, implementing, and maintaining an ongoing effective program evaluation review process that will:

- Result in the improvement of the program experience of students;
- Follow the standards of the EUC policies and align to accreditation bodies' decisions (e.g. CY.Q.A.A. The Cyprus Agency of Quality Assurance and Accreditation in Higher Education/ΔΙ.Π.Α.Ε. Φορέας Διασφάλισης και Πιστοποίησης της Ποιότητας της Ανώτερης Εκπαίδευσης);
- Assess the quality and enhance the overall effectiveness of the Programs, Departments, Schools and University as a whole;
- Identify the strengths and weaknesses in each program under evaluation review and offer opportunities for improvement;
- Establish program action plans and strategies for continuous and ongoing improvement;
- Utilize the information collected through the PER process to better plan and set priorities at the University level.

2. Sources of Information

The aim of every program is to satisfy the needs and expectations of its stakeholders. As a result, continuous monitoring of needs and expectations is essential. The table below shows the way by which the PER process monitors and collects information from the program stakeholders.

STAKEHOLDER	SOURCES OF INFORMATION	DOCUMENTATION
Students	Course Evaluation Questionnaires	Full report of questionnaires output shall be available at the end of each semester
	Program Committee	Students' representation in the Program Committee. Minutes of meetings
Alumni	Alumni Questionnaires (e.g. Έρευνα Αποφοίτων)	Full report of questionnaires output should be available
	Advisory Board	Alumni representation on the Advisory Board. Minutes of meetings.
	Graduate Employment Reports	Reports
Faculty Members	Program Committee	All faculty members teaching in the program are members of the Committee. Minutes of meetings

		Students' representatives in the
		Committee. Minutes of meetings
Professionals – Industrialists	Advisory Board	Professional Bodies, Industrialists representation on the Advisory Board. Minutes of meetings
	National & International Professional Bodies Curriculum Guidelines	Established guidelines
	National & International Legislative Directives on Program Curricula	Directives on program curricula
University	University Strategic Plan	University strategic plan document
Management	School/Departmental Strategic Plan	School/Dept. Strategic Plan.
Other		

In order to facilitate the collection of information from the stakeholders and the development of the PER report, the following Committees/Bodies need to be in place (additional to those described in the EUC Charter):

(a) Program Committee:

The School Council appoints a Program Committee (*as EUC Charter: Annex 12, Article VII, Section 2,*) that monitors the academic and other issues of each program. The Program Committee can appoint sub-committee(s) to handle specific thematic areas and/or collect information.

(i) Terms of reference: The Program Committee shall report to the Department and/or School Council accordingly. For the purposes of the PER procedure the Committee meets at least once per semester. It shall have the following specific responsibilities:

- To oversee and monitor the implementation of the Senate policies and guidelines;
- To monitor curriculum development, delivery and assessment; and make recommendations to the School Council for proposed changes in regulations through the development of the PER report;
- To monitor students' admission and progress;
- To monitor the career path of the Alumni and maintain strong ties between the Alumni and the University;
- To receive and consider the minutes of meetings of the Sub-Committee for the program;
- To receive and consider the summary results of students evaluation questionnaires, as available;
- To provide a forum for discussion of general matters relating to the program;
- To submit the PER report of the program to the Department and School Council through the program coordinator.

The Program Committee Chair comprises the following members:

- The Program Coordinator (as EUC Charter: Annex 12, Appendix B);
- The Program's full time teaching personnel, plus selective part time teaching personnel, if necessary;
- Representative of the Administration personnel according to the specific administrative needs, if required;
- Student representatives.

(b) School or Department or Program Advisory Board:

Each program sets up an Advisory Board with the following broad terms of reference and membership.

(a) Terms of reference: The aim of the Advisory Board is to support the Undergraduate and Postgraduate Programs of each Department and School of the European University Cyprus through an independent evaluation of its activities, feedback and constructive criticism. Overall, the Advisory Board will review and contribute in several areas, including the following:

1. Improvement(s) on academic teaching;

2. Evaluation and provision of suggestions regarding the Undergraduate and Postgraduate Programs of the Department and School structure and content; thus providing students with an enhanced learning experience and a high quality educational program;

3. Proposition of courses that link the Department's/School's programs with the needs of the local and global industries, promote internationalization, academic and professional qualification and foremost employability of graduates;

4. Develop mutually beneficial relationships between the faculty, the industry, stakeholders and authorities, aiming to facilitate constructive exchange of ideas, as well as strengthen the links between them;

5. Contribution of unique and innovative ideas for research and its implementation;

6. Promotion of the faculty's work profile outside the University.

(b) Membership: C/o School and Departments.

(c) Expert Review Panel (ERP):

The PER process refers to the evaluation of the report by an Experts' panel with the following terms of reference and membership:

(i) <u>Membership</u>

The Program Review Panel comprises of academic and subject experts, namely:

• Two External Faculty members who are experts on the program thematic areas.

The Program Coordinator (on behalf of the Program Committee) appoints the two external experts.

(ii) <u>Terms of reference</u>

The Expert Review Panel provides a written review report by commenting and evaluating the findings and implementation plan presented in the PER, as well as by providing relevant recommendations. The role of the Expert Review Panel is to provide feedback only on the academic elements of the Program Evaluation Review. Decisions about the viability and other aspects of the program remain within the remit of the School and University.

3. The PER Process

The PER process to be followed is illustrated in the diagram below. The PER process is a continuous process. It is expected that each Department implements the PER procedure and prepares the PER report (see Template attached) every five (5) years. The Program Committee can initiate a PER procedure at any time within the five year period suggesting documented program changes.



Diagram: PER Procedure

4. Timeframe

Program Evaluation Review is a continuous process. It is expected that every program should complete a PER process every five (5) years. However, the Program Committee is not restricted with regards to the exact time, as it can initiate a PER report at any time within the five year period suggesting documented program changes.

Schools with a program to be reviewed for the 5 years PER process will be notified by the Office of the Vice-Rector of Academic Affairs *in early July.* Since the review process is an ongoing process, the School shall follow all procedures so that the report with the

associated documentation is approved by the Senate in its first meeting of the following calendar year.



Program Evaluation Review (PER) Template

"Program Title"

School of X Department of X

Last Review Date: DD/MM/YY

1. Background/Contextual Information

Briefly describe the **status** of the Program in review (provide **headline** information in terms of student numbers, profiles and accreditations). Focus on any significant developments since the last program review.

Briefly present the actions taken since the **last Program Review**, and the progress of the suggested Program Action Plan (if any).

(Provide references wherever this is applicable / appropriate, see Section)

2. PER methodology

Briefly describe the **methodology** used for the implementation of this review. Refer to how this review is related to the overall University's QA process.

(*Provide references wherever this is applicable/appropriate, see Section ...*)

3. PER Data Sets & Other Sources of Information

List the **data sets** and **other sources of information**, which were used for the implementation of this review. Provide as appendix all the documentation.

4. Curriculum Structure, Objectives, and Learning Outcomes

Briefly describe and review the **general structure/content** and **rationale** of the Program Curriculum in Review. Possible review tasks, which may be undertaken, are the following:

- Review the relevance and adequacy of the current Objectives / Learning Outcomes of the Program in review in relation to the latest research, professional and technological developments (wherever applicable).
- Review how the Curriculum structure and content satisfies the current Objectives and Learning Outcomes of the Program in review (crossreference matrices of 'Courses vs Learning Outcomes' can be designed / used for this purpose).
- Review how the Curriculum's structure / learning outcomes satisfy the requirements of international standards and professional organisations, as well as any legislative requirements (if applicable).
- Review how the Curriculum structure / learning outcomes address stakeholders' (students, alumni, professionals) considerations and expectations.

Feel free to implement any additional / alternative review task you consider appropriate for the Program in review.

(Provide references this is applicable / appropriate, see Section 2)

5. Teaching and Learning

Briefly describe and review the **teaching and learning methods**, **teaching and learning materials**, **academic personnel**, **resources**, **and academic support**, which are provided for the Program in review. Possible review tasks, which may be undertaken, are the following:

- Review the relevance and adequacy of the current teaching, learning, and assessment methods followed, in relation to international standards, stakeholders' feedback, and current educational trends.
- Review the adequacy of the Program's current academic personnel in relation to the teaching and learning needs of the Program Curriculum, international standards, stakeholders' feedback, School and University Strategy, and requirements from professional bodies.
- Review the relevance and adequacy of the Program's current teaching resources and academic support in relation to international standards, stakeholders' feedback, and current educational trends.

Feel free to implement any additional / alternative review task you might feel is appropriate for the Program in review.

(Provide references wherever this is applicable / appropriate, see Section 2)

6. Sustainability

Briefly describe and review the **Sustainability** aspects of the Program in review. Possible review tasks, which may be undertaken, are the following:

- Review the student recruitment / retention policy, which is followed for the Program in review, in relation to the latest enrolment, retention, and marketing data.
- Review the employability dimension of the Program in review, in relation to the latest alumni satisfaction and graduate employment reports, and in relation to the feedback provided by industrial stakeholders.
- Review how the Program in review fits and contributes to the satisfaction of the School's and University's long-term strategic plans.
- Review how the Program in review addresses the latest national and international professional needs and trends.

Feel free to implement any additional / alternative review task you consider as appropriate for the Program in review.

(Provide references wherever this is applicable / appropriate, see Section 2)

7. SWOT Analysis

Based on your review, please provide a Strengths/Weaknesses/Opportunity/ Threats Analysis for the Program in Review:

Strengths	Weaknesses
 Strength x Strength y 	 Weakness x Weakness y
Opportunities	Threats
 Opportunity x Opportunity y 	 Threat x Threat y

8. Proposed Program Modifications

Identify the proposed program modifications by providing the necessary documentation on the following areas:

I. Program modifications:

- (a) Title
- (b) Aim and Objectives
- (c) Learning Outcome(s)
- (d) Curriculum/Program structure
- (e) Entry requirements/criteria

II. Course(s) modifications

- (a) Title
- (b) Aim and Objectives
- (c) Learning Outcomes
- (d) Course Content
- (e) Teaching Methodology
- (f) Assessment Methods
- (g) Recommended Textbook(s)
- (h) Other (ECTS, hours, etc.)

III. Program quality control mechanisms

IV. Other (Specify)

9. Implementation Plan

Describe the proposed action plan for the proposed modifications/changes in a timetable or Gantt Chart.

Names and signatures of the programme's Coordinator, the Chair and the Members of the Internal Quality Committee

Name	Signature
Programme's Coordinator:	
Chairperson of the Department:	
Dean of the School:	
Members of Internal Quality Committee:	
Prof. Loizos Symeou, Vice-Rector for Academic Affairs, Chair of Committee on Internal Quality Assurance	
Dr. Theodoros Xanthos, Professor, Faculty Representative, School of Medicine	
Dr. Vasiliki Gkretsi, Associate Professor, Faculty Representative, School of Sciences	
Dr. Georgia Petroudi, Assistant Professor, Faculty Representative, School of Hum., Social and Ed. Sciences	
Dr. Christiana Markou, Assistant Professor Faculty Representative, School of Law	
Dr. Christakis Sourouklis, Assistant Professor, Faculty Representative, School of Business Administration	
Dr. Ioannis Karis, Adjunct Assistant Professor, Quality Assurance Expert	
Dr. Pieris Chourides, Associate Professor, Head of Internal Process and Quality Unit, Quality Assurance Expert	
Ms Athanasia Ktena, Administrative Head, Office of the VRAA, Administration Representative	
Mr Andreas Maliappis, Undergraduate Student	

Date: Click to enter date

Appendix 8 - FINDATA Privacy Policy

Information on the processing of personal data of applicants, students and graduates of the FINDATA study programme

in accordance with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).

This information applies to the processing of personal data of **applicants**, **students** and **graduates of the FINDATA study programme**, implemented as a joint study programme in cooperation with the University of Pardubice (Czech Republic), European University - Cyprus Ltd. (Cyprus), LIBERA UNIVERSITA 'MARIA SS ASSUNTA - LUMSA (Italy) and Vilnius University (Lithuania).

1. Identity and contact details of data controllers and data protection officers (DPO)

The data controllers of the personal data of applicants and students of the FINDATA study programme are the following partner universities, which jointly implement the FINDATA study programme:

1.1 University of Pardubice,

- Studentská 95, 532 10 Pardubice, the Czech Republic, <u>https://www.upce.cz/</u>, e-mail: <u>podatelna@upce.cz</u>.
- **DPO contact**: dpo@upce.cz

1.2 European University – Cyprus Ltd.

- 6, Diogenous Str, 2404 Engomi, P.O. Box: 22006, Nicosia Cyprus, <u>European University</u> <u>Cyprus: #1 university for international and EU students (euc.ac.cy)</u>, e-mail: <u>info@euc.ac.cy</u>
- DPO contact: <u>dpo@euc.ac.cy</u>

1.3 LIBERA UNIVERSITA ' MARIA SS ASSUNTA – LUMSA

- Via della Traspontina 21, 00193 Rome, Italy, <u>Homepage | Università di Roma LUMSA</u>, email: <u>info@lumsa.it</u>
- DPO contact: privacy@lumsa.it

1.4 Vilnius University

- Universiteto g. 3, LT-01513, Vilnius, Lithuania, <u>Vilnius University (vu.lt</u>), e-mail: infor@cr.vu.lt
- **DPO contact:** dap@vu.lt

These data controllers either act as individual data controllers or cooperate as joint data controllers, within the meaning of Article 26 GDPR, for the processing of personal data of applicants, students and graduates of the FINDATA study programme.

This privacy policy applies to the processing of personal data by joint data controllers. For more information on the processing of personal data of applicants, students and graduates of the FINDATA study programme by the individual data controllers, please visit their websites:

- Privacy Notice GDPR European University Cyprus (euc.ac.cy)
- Privacy Policy (vu.lt)
- Privacy policy | Università di Roma LUMSA

- <u>Opening Statement of the University of Pardubice about the Protection of Personal Data</u> <u>Universita Pardubice (upce.cz).</u>

2. Categories of data subject

The personal data processed by the joint data controllers concern the following categories of data subjects:

- applicants for the FINDATA study programme.
- students of the FINDATA study programme.
- graduates of the FINDATA study programme.

3. Types of personal data and processing purposes

3.1 Applicants

The joint data controllers shall jointly process the following types of **personal data of applicants** to the FINDATA study programme:

- your personal identification data provided on the application form (name, surname, academic title, address, date of birth, birth number (if assigned), sex, nationality, number of ID document, etc.), motivation letter and letters of recommendation.
- information on completed studies, information on language skills.
- your contact information (an e-mail address, phone number).

The **purposes of processing applicants' personal data** by the joint data controllers are as follows:

- admission procedures (administration of the admission process, verification of the conditions for admission, issuing of the decision on admission to study, etc.).
- enrolment of admitted applicants.
- communication with the applicants.

3.2 Students

In case that an applicant is admitted to study, the joint data controllers will further process the following **personal data of students** of the FINDATA study programme:

- personal data provided in the application form.
- data concerning the course and results of studies (i.e. information on enrolled and completed courses, passed exams, information on completed internships, the topic of the final thesis, results of the final exam, information on the joint diploma etc.).
- data concerning tuition fees, scholarships and history of payments.

The **purposes for which the joint data controllers process the personal data of the students** are as follows:

- the implementation and managements of the FINDATA study programme (realization of the study programme, keeping study records, the final examinations, and the graduation of the students, awarding of a joint diploma).
- communication with the students.
- selection of scholarship holders, administration and payment of scholarships.
- administration of tuition fees.

- FINDATA project management and administration.
- transfer of personal data of scholarship holders to the grant provider (European Commission, EACEA) for control purposes.

3.3 Graduates

In case of **FINDATA graduates**, the following personal data will be processed by the joint data controllers:

- information on completed studies.
- history of payments.

The **purpose** of the processing is:

- archiving of alumni study records.
- FINDATA project management and administration.

Each partner university may individually process also other personal data of applicants, students, and graduates of the FINDATA study programme, for other purposes, such as:

- fulfilment of legal obligations towards public authorities related to the obligation to declare that a foreigner has been admitted to study, the obligation to register admitted students in national registers, etc.
- the provision of library services, canteen, and accommodation services, etc.
- ensuring security on the university campus, security of information systems.
- communication with students, communication with alumni.

For more information about the types of personal data and the purposes of the processing of personal data of FINDATA applicants, students, and graduates by individual data controllers, please visit their websites above.

4. Legal basis

The joint data controllers process your personal data in compliance with the provisions of the GDPR and national legislation of each joint data controller, on the basis of the following legal ground:

4.1 Legal compliance

- the joint data controllers, as universities, provide higher education on the basis of national legislation.
- the joint data controllers fulfil their legal obligation toward public authorities under the national legislations.

4.2 Legitimate interests:

- based on legitimate interests, the joint data controllers process the personal when exchanging information on meeting the conditions for admission, the progress, and results of studies, as well as when exchanging information on the award of scholarships and the collection of tuition fees.
- on the basis of this legal ground the joint data controllers also transmit the personal data to the grant provider (European Commission, EACEA) for the control purposes.

Individual data controllers also process students' personal data based on other legal grounds. For more information, please visit websites of each of the data controllers above.

5. Categories of recipients of personal data

Personal data may be disclosed to the following subjects:

- public authorities under the national legislation.
- banks carrying out payments of scholarships and tuition fees.
- grant provider when carrying out controls on the use of the grant.

6. Your rights

Applicants, students, and graduates of the FINDATA study programme as a data subjects have the following rights:

- **6.1 Right to access personal data** you are entitled to ask any of the joint data controllers (the university) to provide you with information about your personal data processed and the purposes of the processing.
- **6.2 Right to rectification** you have the right to have any inaccurate or incomplete personal data corrected.
- **6.3** Right to erasure (the right to be forgotten) concerns the data controllers's obligation to delete the personal data processed; however, this right does not always apply, as there are cases where the data controllers have to process the personal data for the proper performance of its tasks (fulfilment of a legal obligation).
- **6.4 Right to restriction of processing** applicable in case you do not want the data controller to process personal data other than for inevitable legal reasons.
- **6.5 Right to data portability** you may require that the data controller transfer your data to the other designated data controller, unless there is a legal impediment.
- **6.6 Right to object to an automated individual decision making** you may object if you think that the data controller processes your data unlawfully; the objection may also be made directly to an automated decision making and profiling.
- **6.7** Right to file a complaint with the Office for Personal Data Protection whatever your request, initiative or complaint, you may contact the national Personal Data Protection Office of each data controller.

7. How to execute your rights

If you wish to exercise any of your rights as a data subject, you may contact any of the joint data controllers. We will inform you of the outcome of your request **within 30 days** from the date of receiving it. Due to the **complexity and the number of requests processed**, we reserve the right to **extend** this deadline by a further 60 days.

You may exercise your rights through the Data Protection Officer (DPO) of each of the joint data controllers. The contact details are set out in Art. 1 above.

If the data controller concerned is not competent to deal with your request, it will inform you without undue delay and advise you which of the joint data controllers you should contact.

The exercise of your **rights** is free of charge. We may require a fee for processing a request only if the request is **manifestly unfounded or unreasonable** due to repetition of the same request.

For more **detailed rules** on how to exercise your rights, please visit the websites of the individual data controllers.
Appendix 9 - Joint Controller Agreement





JOINT CONTROLLER AGREEMENT

This Joint Controller Agreement is made between:

UNIVERSITY OF PARDUBICE (UPCE), Faculty of Economics and Administration a higher education institution established by law established in Studentska 95, PARDUBICE 532 10, the Czech Republic, Identification Number: 00216275, VAT Number: CZ00216275 PIC: 999453663 represented by Prof. Ing. Libor Čapek, Ph.D., rector

and

EUROPEAN UNIVERSITY - CYPRUS Ltd.

a higher education institution established in: 6 Diogenes Str., Nicosia, Post Code: 1516, Cyprus Identification number: E10208383, VAT number: 10083353J Account number: 357009812755 IBAN: CY16002001950000357009812755 BIC/SWIFT Code: BCYPCY2N; Bank: Bank of Cyprus PIC: 999739619 Represented by Dr. Christoforos Hadjikyprianou, CEO and President of the Council,

and

LIBERA UNIVERSITA ' MARIA SS ASSUNTA – LUMSA

Department of Law, Economics, Politics and Modern Language a higher education institution established with royal decree of 26 October 1939, n. 1760 established in: Via della Traspontina 21, 00193 Rome Identification number: 02635620582, VAT number: 01091891000 Account number: SWIFT BCITITMM; IBAN: IT43S0306905238100000001983 Represented by Professor Francesco Bonini, Rector,

and

VILNIUS UNIVERSITY

Status: Public institution Address: Universiteto g. 3, LT-01513, Vilnius, Lithuania Identification Number: 211950810, VAT Number: LT119508113 Account number: LT32 7300 0100 0246 2504 Represented by Prof. Dr. Rimvydas Petrauskas, Rector

hereinafter, jointly or individually, referred to as "Parties"

decided to enter into the following **Joint Controller Agreement** (hereinafter referred to as "*Agreement*")

relating to the project entitled

JOINT MASTER'S STUDY PROGRAMME FINANCIAL DATA ANALYTICS AND SUSTAINABLE FINANCE (hereinafter referred to as "FINDATA STUDY PROGRAMME").

1. General provisions

- 1.1 The Parties have signed the **FINDATA CONSORTIUM AGREEMENT** dated 23rd October 2023 and agreed to cooperate in the implementation of the FINDATA STUDY PROGRAMME.
- 1.2 The cooperation requires the Parties to share and further process personal data with each other.
- 1.3 The Parties seek to regulate the terms and conditions of the processing of personal data in such a way that they meet the provisions of the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (hereinafter referred to as the "*GDPR*").
- 1.4 As the Parties jointly determine the purposes and means of the processing of personal data, they are Joint Controllers within the meaning of Article 26 of the GDPR.
- 1.5 The Agreement sets out the responsibilities of the Joint Controllers for compliance with their obligations under the GDPR, with regard to the exercise of the data subject's rights.
- 1.6 The Joint Controllers shall process the Personal Data in accordance with this Agreement, the GDPR and the FINDATA CONSORTIUM AGREEMENT. Each Party shall comply with the procedures required by applicable national Data Protection Legislation.
- 1.7 This Agreement is limited to personal data shared by the Parties in connection with the implementation of the FINDATA STUDY PROGRAMME and in accordance with the FINDATA CONSORTIUM AGREEMENT (hereinafter referred to as "shared personal data").
- 1.8 The specification of the data processing under this Agreement (the relevant categories of data subjects, the types of personal data, the purposes of the processing and the processing period) is set out in Annex 1. General description of each Party's respective role in relation to the data processing follows from the FINDATA CONSORTIUM AGREEMENT.

2. Controller's rights and obligations

- 2.1. The Parties, as joint data controllers, shall process shared personal data exclusively for the purposes of implementing the FINDATA STUDY PROGRAMME and ensuring cooperation under the FINDATA CONSORTIUM AGREEMENT, to the extent necessary as set out in Annex 1, and shall not use shared personal data for other own needs or purposes, unless otherwise provided by the GDPR or national legislation.
- 2.2. The Parties' processing of the shared personal data requires that at least one of the legal grounds for the processing of personal data in Art. 6 of the GDPR is present.
- 2.3. The Parties declare that shared personal data does not constitute special categories of personal data within the meaning of Art. 9 of the GDPR.
- 2.4. The Parties will not process shared personal data by automated means of processing.

- 2.5. The Parties will not transfer shared personal data to any entity situated in a third country, except where this is in compliance with Chapter V of the GDPR, and after prior notification to the other Parties.
- 2.6. Each Party is obliged to enter into data processor agreements with any processors that process shared personal data on behalf of that Party. The respective Party is obliged to ensure that the data processor agreements comply with all requirements pursuant to Art. 28 of the GDPR and to notify the other Parties of such agreements.
- 2.7. The Parties are obliged to ensure adequate security of the shared personal data processed as defined in Part 4 of this Agreement.
- 2.8. The Parties shall maintain the confidentiality of the shared personal data. The Parties shall ensure that their employees and other persons involved in the cooperation on their side are bound by the duty of confidentiality in accordance with the applicable legal provisions and are informed of the possible consequences in case of breach of this duty.
- 2.9. At the request of the other Party, the Party shall at any time provide the necessary cooperation and all information to prove that the obligations set out in this Agreement and the GDPR have been fulfilled.
- 2.10. Where the GDPR requires the consent of the data subject, the Party obtaining the personal data shall be obliged to obtain such consent in accordance with the GDPR and to provide evidence that it has done so throughout the processing.
- 2.11. The Parties are obliged to delete shared personal data from all their electronic and physical systems, including copies of shared personal data, immediately after the expiry of the processing period set in the Annex 1.
- 2.12. If a Party breaches its obligations under this Agreement or the GDPR, it shall be liable to the other Party for the damage caused. Damage within the meaning of this paragraph shall also include any sanctions imposed by public authorities for the breaches of the GDPR, as well as any compensation to data subjects ordered by a court or other competent public authority.

3. The rights of data subjects

- 3.1. Each Party shall respect the rights of the data subjects as regulated in the GDPR.
- 3.2. The Parties shall ensure that clear and sufficient information in accordance with Art. 12 14 of the GDPR regarding the shared personal data and of the information on the essence of this Agreement, is made available to the data subjects by any means they deem appropriate, including the publication of relevant information on the FINDATA STUDY PROGRAMME website www.emfindata.eu . If the personal data is collected from the data subject, the collecting Party shall be responsible for providing the information to which the data subject is entitled without delay.
- 3.3. The Parties acknowledge that a data subject may contact either Party with questions or requests concerning personal data processing. A request made by a data subject within the meaning of Articles 15 to 22 of the GDPR shall always be dealt with, and information shall be provided by the Party receiving the request.
- 3.4. The Parties are obliged to provide each other with the requested cooperation in order to fulfil the information obligation and for the purpose of preparing a response and dealing with the data subject's rights under Articles 15 to 22 of the GDPR.

4. Security and breach reporting

- 4.1. The Parties undertake to implement appropriate technical and organizational measures to ensure an appropriate level of security in relation to the risks posed by the data processing, in particular the risk of accidental or unlawful destruction, loss or alteration and the risk of unauthorized disclosure of, or unauthorized access to, the shared personal data. The Parties are obliged to be able to demonstrate that the processing is carried out in accordance with the GDPR and other applicable legislation. These measures shall be reviewed and updated as necessary.
- 4.2. The appropriate measures referred to in the previous paragraph shall include:
 - ensuring that the processing of shared personal data is carried out by authorised persons;
 - making the authorised persons aware of the obligation of confidentiality and other relevant legal obligations;
 - preventing unauthorized persons from having access to the shared personal data;
 - prevent the unauthorised reading, creation, copying, transmission, modification or deletion of records containing shared personal data;
 - the pseudonymisation and encryption of shared personal data, where applicable;
 - the ability to ensure the continued confidentiality, integrity, availability and resilience of processing systems and services;
 - the ability to restore the availability of and access to shared personal data in a timely manner in the event of physical or technical incidents.
- 4.3. If either Party discovers a **personal data breach**, it shall promptly, not later than 48 hours after discovery, notify the other Parties of such a breach in accordance with the procedure set out in Article 33 of the GDPR.
- 4.4. The notification should include all the information referred to in Art. 33 (3) of the GDPR.
- 4.5. The obligation to notify the supervisory authority pursuant to Art. 33 of the GDPR shall be fulfilled by the Party responsible for the system or process underlying the security breach in question. Similarly, the obligation to notify data subjects pursuant to Article 34 of the GDPR is imposed on the Party where the breach occurred.
- 4.6. The Parties agree to provide each other with the necessary assistance in order to facilitate the management of breaches.

5. Final provisions

- 5.1. The Agreement is concluded for the duration of the FINDATA CONSORTIUM AGREEMENT specified in the Art. 1.1 above. Termination of the Agreement shall not affect any provisions which, by their nature, are intended to survive (in particular the duty of confidentiality under the Art. 2.8 and the liability obligation under the Art. 2. 12).
- 5.2. The Agreement may be amended of modified only by written amendments signed by authorised representatives of the Parties.
- 5.3. In matters not expressly covered by this Agreement, the rights and obligations of the Parties shall be governed by the relevant provisions of the GDPR. In the event of a dispute that cannot be resolved amicably, the laws of the Czech Republic shall apply, with the exception of its conflict of law provisions.
- 5.4. All disputes arising out of or in connection with the Agreement, which cannot be solved amicably, shall be finally settled by the courts of the Czech Republic.

- 5.5. The Agreement shall enter into force on the date of its signature by the last Party.
- 5.6. The Agreement is drawn up in eight legal copies in the English language, two for each Party.

In Pardubice, on May 2024

In Nicosia, on May 2024

prof. Ing. Libor Čapek, Ph.D. Rector **University of Pardubice** Dr. Christoforos Hadjikyprianou CEO and President of the Council **European University – Cyprus Ltd.**

In Rome, on May 2024

In Vilnius, on ... May 2024

Prof. Francesco Bonini Rector LIBERA UNIVERSITA ' MARIA SS ASSUNTA – LUMSA ••••••

Prof. Dr. Rimvydas Petrauskas Rector **Vilnius University**

Annex 1 – Specification of Data processing

1. Categories of data subjects

The personal data which are processed under this Agreement concern the following categories of data subjects:

- Applicants for the FINDATA STUDY PROGRAMME
- Students of the FINDATA STUDY PROGRAMME
- Graduates of the FINDATA STUDY PROGRAMME
- Staff mobility

2. Types of personal data

The following types of personal data will be processed by the Parties under this Agreement:

- personal identification details (name, surname, academic title, address, date of birth, birth number, if assigned, sex, family status, nationality, number of ID document, country of origin).
- contact information (an e-mail address, phone number home address, address of residency during studies).
- bank account.
- information on completed education, information on language skills.
- data concerning the course and results of studies (i.e. information on enrolled and completed courses, passed exams, information on completed internships, the topic of the final thesis, results of the final exam, information on the joint diploma etc.).
- data concerning tuition fees, scholarships and history of payments.

3. Purpose

The purposes of data processing under this Agreement are as follows:

- admission procedures (administration of the admission process, verification of the conditions for admission, issuing of the decision on admission to study, etc.).
- enrolment of admitted applicants.
- communication with the applicants and students.
- the implementation and managements of the FINDATA study programme (realization of the study programme, keeping study records, the final examinations, and the graduation of the students, awarding of a joint diploma).
- selection of scholarship holders, administration and payment of scholarships.
- administration of tuition fees.
- archiving of alumni study records.
- FINDATA project management and administration.
- transfer of personal data of scholarship holders to the grant provider (European Commission, EACEA) for control purposes.
- staff mobility and the necessary processing of personnel and payroll agenda.

4. Processing period

Processing period is set by national legislation and/or by internal rules of each Party.



DECLARATION OF CONSENT FOR PROCESSING OF PERSONAL DATA/ ΕΝΤΥΠΟ ΕΞΟΥΣΙΟΔΟΤΗΣΗΣ ΧΡΗΣΗΣ ΠΡΟΣΩΠΙΚΩΝ ΔΕΔΟΜΕΝΩΝ

PERSONAL DATA/ΠΡΟΣΩΠΙΚΑ ΔΕΔΟΜΕΝΑ

Reg.No/Ap.Εγγραφής:	ID/Pass.Number/Αρ.Ταυτότητας-Διαβατηρίου:
Name/Ονοματεπώνυμο:	
Ι Authorize/Εξουσιοδοτώ τον/την:	
1. Name/Ονοματεπώνυμο:	
ID Number/Αρ.Ταυτότητας:	Τelephone Number/Αρ.Τηλεφώνου:
Parent/Γονέας Guardian/Κηδεμόνας Relative/Σ	υγγενής 🔄 Friend/Φίλικό πρόσωπο 📄 Employer/Εργοδότης 🔄 Other/Άλλο 📃
2 . Name/Ονοματεπώνυμο:	
ID Number/Αρ.Ταυτότητας:	Τelephone Number/Αρ.Τηλεφώνου:
Parent/Γονέας Guardian/Κηδεμόνας Relative/Σ	υγγενής 🔄 Friend/Φίλικό πρόσωπο 🗌 Employer/Εργοδότης 🗌 Other/Άλλο 🗌
3 . Name/Ονοματεπώνυμο:	
ID Number/Αρ.Ταυτότητας:	Τelephone Number/Αρ.Τηλεφώνου:
Parent/Γονέας Guardian/Κηδεμόνας Relative/Σ	υγγενής Friend/Φίλικό πρόσωπο Employer/Εργοδότης Other/Άλλο

to receive information for the following categories/ $\delta\pi\omega\zeta\lambda\alpha\mu\beta\alpha\nu\epsilon$ ι τις πιο κάτω πληροφορίες:

- 1. Finacial Information-Obligations/Οικονομικές Πληροφορίες-Υποχρεώσεις (i.e explanation of statement of account/επεξήγηση κατάστασης λογαριασμού)
- 2. Academic Performance/Ακαδημαϊκή Επίδοση (i.e semester grades/αναλυτική βαθμολογία τετραμήνου)
- 3. Personal Information/Προσωπικά Δεδομένα (i.e verification letters/βεβαιώσεις εγγραφής, χορηγίας κ.τ.λ)

1. I, the undersigned, hereby provide my consent to the disclosure by the organisation EUROPEAN UNIVERSITY CYPRUS (hereinafter the "EUC") of my personal data contained and/or indicated herein, to the aforesaid authorise parties (the "Purpose").

2. For the avoidance of any doubt, the following apply:

i. Any information and data provided herein by the undersigned to the EUC and which will be used, either directly or indirectly, by the EUC for the performance of the Purpose, shall at all times be identified, clearly marked and recorded by the EUC as the personal data of the undersigned.

ii. All personal data acquired from the undersigned pursuant to this form shall be solely used by the EUC for the performance of the Purpose and shall not be further processed or disclosed to any third party, other than the aforesaid authorised parties, without the consent of the undersigned unless this is required and/or allowed pursuant to the provisions of the Regulation (EU) 2016/679 on the Protection of Personal Data and/or the provisions of the applicable local legislation in relation to the protection of personal data (as amended from time to time) and/or the provisions of any other applicable legislation.

iii. The undersigned has been informed of his/her rights in relation to his/her data contained herein. The aforesaid rights are outlined analytically in the Privacy Notice of the Organization, a copy of which can be found at https://www.euc.ac.cy/en/legal/privacy-notice---gdpr.

1. Εγώ ο/η κάτωθι υπογεγραμμένος/η, δια του παρόντος εντύπου συγκατατίθεμαι στην αποκάλυψη, από τον οργανισμό ΕΥΡΩΠΑΪΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΚΥΠΡΟΥ (εφεξής το "ΕΠΚ"), των προσωπικών μου στοιχείων, τα οποία περιέχονται και/ή αναφέρονται στο παρόν έγγραφο στα πιο πάνω αναφερόμενα εξουσιοδοτημένα πρόσωπα (εφεξής ο "Σκοπός").

2. Προς αποφυγή τυχών αμφιβολιών ισχύουν τα ακόλουθα:

i. Οποιεσδήποτε πληροφορίες και δεδομένα, τα οποία παρέχονται δια του παρόντος εντύπου από τον/την κάτωθι υπογεγραμμένο/η στο ΕΠΚ και τα οποία πρόκειται να χρησιμοποιηθούν από το ΕΠΚ για την επίτευξη του Σκοπού, θα προσδιορίζονται, επισημαίνονται και καταγράφονται από το ΕΠΚ ως τα προσωπικά δεδομένα του/της κάτωθι υπογεγραμμένου/ης.

ii. Όλα τα προσωπικά δεδομένα τα οποία δίδονται από τον/την κάτωθι υπογεγραμμένο/η δια του παρόντος εντύπου, θα χρησιμοποιηθούν αποκλειστικά από το ΕΠΚ για την επίτευξη του Σκοπού και δεν δύναται να υποστούν περαιτέρω επεξεργασία ή να αποκαλυφθούν σε τρίτους με εξαίρεση τα πιο πάνω αναφερόμενα εξουσιοδοτημένα πρόσωπα, χωρίς τη συγκατάθεση του/της του/της κάτωθι υπογεγραμμένου/ης εκτός αν αυτό απαιτείται ή επιτρέπεται από τις διατάξεις του Γενικού Κανονισμού για την Προστασία Δεδομένου Προσωπικών δεδομένων (ως αυτή τροποποιείται από καιρού εις καιρόν) ή/και τις διατάξεις οποιασδήποτε άλλης εφαρμοστέας νομοθεσίας.

Ο/Η κάτωθι υπογεγραμμένος/η έχει ενημερωθεί για τα δικαιώματα του σχετικά με τα προσωπικά του στοιχεία. Τα εν λόγω δικαιώματα καταγράφονται αναλυτικά στη Δήλωση Απορρήτου (Privacy Notice) του Οργανισμού, αντίγραφο του οποίου ο/η κάτωθι υπογεγγραμένος/η δύναται να βρει διαδικτυακά στο https://www.euc.ac.cy/en/legal/privacy-notice---gdpr.



Επιτροπή για Φοιτητές με Ειδικές Εκπαιδευτικές Ανάγκες (Ε.Φ.Ε.Ε.Α.)

Έντυπο Συγκατάθεσης για Ενημέρωση Ακαδημαϊκού και Διοικητικού προσωπικού σχετικά με τις Αποφάσεις Ακαδημαϊκών Διευκολύνσεων

Ονοματεπώνυμο φοιτητή	
Registration Number	
Σχολή	

Δυσκολίες που αντιμετωπίζει/παρουσιάζει ο φοιτητής	
Διευκολύνσεις που δόθηκαν μετά από αξιολόγηση και απόφαση ΕΦΕΕΑ (κάποιες ενδέχεται να τροποποιηθούν εφόσον υπάρχει επιλογή)	

Επίσης, αποφασίζω συνειδητά ότι επιθυμώ επιπλέον (τοποθετείστε $\sqrt{6}που$ ισχύει):

 να πληροφορηθούν από την Ε.Φ.Ε.Ε.Α. οι διδάσκοντες μου (και η Μονάδα Εξ' Αποστάσεως Εκπαίδευσης εφόσον ανήκω σε εξ' αποστάσεως πρόγραμμα σπουδών) για την αναπηρία/μαθησιακή/ψυχοσυναισθηματική μου δυσκολία.

- 2. να πληροφορηθεί από την Ε.Φ.Ε.Ε.Α το Τμήμα Εγγραφών:
 - Α. για τις ακαδημαϊκές διευκολύνσεις που μου προσφέρονται
 - Β. για την αναπηρία/μαθησιακή/ψυχοσυναισθηματική μου δυσκολία

Υπογραφή φοιτητή Ημερομηνία:



Committee for Students with Special Needs (CSSEN)

<u>Consent form to Inform Academic and Administration Staff for decisions concerning</u> <u>Academic accommodations</u>

Student's Name	
Registration Number	
School	

Student's difficulties

Academic Accommodations given after CSSEN's assessment and final decision (some may change if an option is given)

I (student) with registration number accept the provided academic accommodations and <u>give my</u> <u>permission to **CSSEN**/KEΨYΠA to inform my instructors (and the Distance Education Unit</u> <u>in case I'm enrolled in a distance learning program of study</u>) about my difficulty in order to provide me the academic accommodations which I am entitled based on the relevant law:

Additionally, I willingly decide that I also wish ($\sqrt{\text{where applicable}}$):

- my instructors (and the Distance Education Unit in case I'm enrolled in a distance learning program of study) to be informed by CSSEN for my disability/academic/psychological difficulties
- the Department of Enrolment to be informed:
 A. about my academic accommodations

B. about my disability/academic/psychological difficulties

Student's Signature	Date:
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Επιτροπή για Φοιτητές με Ειδικές Εκπαιδευτικές Ανάγκες (Ε.Φ.Ε.Ε.Α.)

Έντυπο Δήλωσης Εκπαιδευτικών δυσκολιών και άλλων αναγκών προς αξιολόγηση από <u>Ε.Φ.Ε.Ε.Α.</u>

Αιτούμαι αξιολόγησης από την Ε.Φ.Ε.Ε.Α. του Ευρωπαϊκού Πανεπιστημίου Κύπρου, για παραχώρηση ακαδημαϊκών διευκολύνσεων/στήριξης σχετικά με τις πιο κάτω δυσκολίες:

Μαθησιακή Δυσκολία [Διαταραχή Ανάγνωσης (Δυσλεξία), Διαταραχή		
Μαθηματικών (Δυσαριθμησία), Διαταραχή Γραπτής Έκφρασης, Μαθησιακή Διαταραχή μη-		
προσδιοριζόμενη αλλιώς, Ειδική Διαταραχή της Μάθησής]		
Διαταραχή Ελλειμματικής Προσοχής και Υπερκινητικότητας (ΔΕΠ-Υ)		

	Ψυχοσυναισθηματική Διαταραχή
	Ακουστική Αναπηρία
	Οπτική Αναπηρία
	Κινητική Αναπηρία
	Διανοητική Αναπηρία
	Πρόβλημα Υγείας (περιγράψτε):
	Άλλο πρόβλημα (περιγράψτε):
Ονομα	ιτεπώνυμο φοιτητή:

Αριθμός μητρώου (registration number)

Υπογραφή Φοιτητή Ημερομηνία:



Committee for Students with Special Needs (CSSEN)

Statement of academic and other difficulties for assessment by CSSEN

I apply to CSSEN of European University Cyprus, for assessment of academic accommodations and/or support concerning the below difficulties:

	Learning difficulties : Reading Disorder (Dyscalculation), Expression Disorder, Lea Special Learning Disorder	Dyslexia), Mathematics Disorder rning Disorder not otherwise specified,
	Attention Deficit Hyperactivity Disorder	(ADHD)
	Psychological disorders & Emotional Dis	tress
	Hearing Impairment	
	Vision Impairment	
	Movement Disability	
	Health problem (define):	
•••••		
	Other problem (define):	
Studen	t name:	
Regist	ration number)	
Studen	t Signature	Date:



Επιτροπή για Φοιτητές με Ειδικές Εκπαιδευτικές Ανάγκες (Ε.Φ.Ε.Ε.Α.)

Έντυπο Αρνητικής Δήλωσης για Λήψη Διευκολύνσεων από την Ε.Φ.Ε.Ε.Α., ή/και Ενημέρωση του Ακαδημαϊκού και Διοικητικού Προσωπικού

Υπογραφή Φοιτητή/τριας Ημερομηνία:



Committee for Students with Special Needs (CSSEN)

<u>Negative declaration for accepting, and/or informing the academic and administrative</u> <u>staff, for the academic accommodations given by CSSEN</u>

Student's Signature

Date: