SYLLABUS

INTERNATIONAL EUROPEAN UNIVERSITY

BUSINESS ARS EST

EUROPEAN SCHOOL OF BUSINESS

Professional practice of software engineering
Educational program «Software engineering»

2024

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1	Name of the course and educational program

Professional practice of software engineering
Educational program "Software engineering"

2	Course description

The study of the academic discipline "Professional Practice of Software Engineering" is aimed at mastering and using knowledge about the legal protection of intellectual property rights in the country and in the context of international cooperation in the process of professional activity programmer, the ability to protect intellectual property, based on the law of Ukraine on copyright protection, the ability to form practical employment skills in market relations, understanding and perception of ethical norms of behavior in relation to other people and in relation to nature (principles of bioethics).

3	Study prerequisites

The academic discipline is related to the disciplines "Higher and Applied Mathematics", "Probability Theory and Mathematical Statistics", "Object-Oriented Programming", "Computer Discrete Mathematics".

4	Amount of credits/hours

4 ECTS credits/ 120 hours

5	Training format

Blended learning

6	Classroom location

Audience 405. https://dist.ieu.edu.ua/course/index.php?categoryid=652

7	Information about the teacher

Orel Olga

8	Department

Department of Information Technologies

9	Office location

Kyiv, Akademika Glushkova Ave., 42 B, room 505

10	Schedule of counseling

Every Monday from 12:00 to 16:00 with prior appointment via corporate mail

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11	E-mail of the teacher

olha_orel@ieu.edu.ua

12	Course objectives

The course aims to provide knowledge, skills and abilities in the field of professional activity and ethics of software engineering. Students should master issues related to accreditation, certification and licensing; codes of ethics and professional conduct; social and legal issues; the nature and significance of professional associations and industry standards.

13	The role of academic discipline in achieving program results

PR02. Know the code of professional ethics, understand the social significance and cultural aspects of software engineering and adhere to them in professional activities.
PR04. Know and apply professional standards and other regulatory documents in the field of software engineering.
PR23. Be able to document and present the results of software development

14	Learning outcomes

Know:
- basics of the history of software engineering,
- theoretical foundations of decision-making during the creation and maintenance of software;
- the role of standards and the body of knowledge on which they are based standards;
- ethical and legal norms regarding software engineering;
- principles of teamwork on a project during software development.

Be able:
- make the right decisions in the field of software development ensuring compliance with industry standards and legal regulations;
- explain and enforce the legislation;
- plan the software testing process;
- develop and maintain software as part of a team of software developers;
- analyze documentation on the development of a software product and adequately assess the status of its development;
- evaluate product quality.

15	Course content

Section 1. Social, Legal, and Ethical Issues of Software Engineering
Topic 1. Introduction to the discipline. Philosophical issues of software engineering.
Topic 2. Social issues facing programmers.
Topic 3. Professional and ethical responsibility of software engineering professionals.
Section 2. Professional Practice of Software Engineering
Topic 4. Ensuring intellectual property protection in the field of software engineering.
Topic 5. Privacy and civil liberties.
Topic 6. Computer Crimes and Related Issues.
Topic 7. The nature and role of professional societies.
Topic 8. Professional activities of a software engineer.

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16	Course materials and requirements

1. Antonov V.M. Intellectual Property and Computer Copyright. Kyiv: KNT, 2005. 520 p.
2. Intellectual Property Law: Academic Course: Textbook for Students of Higher Educational Institutions / Edited by O.A. Pidopryhory. Kyiv: Concern "Publishing House "In Yure", 2004. 672 p.
3. Azarov D.S. Crimes in the field of computer information (criminal legal research): Monograph. Kyiv: Ataka, 2007. 304 p.
4. Information Security (Socio-Legal Aspects): Textbook / Ostroukhov V.V., Petryk V.M., Prysyazhnyuk M.M. et al.; edited by E.D. Skulysh. Kyiv: KNT, 2010. 776p.
5. Motlyakh O.I. Methods of investigating computer crimes. Monograph. Kyiv: "Education of Ukraine", 2010. 296 p. 6. Samiylenko O.A. Peculiarities of investigating property thefts committed using computer technologies: monograph. Kyiv: KNT, 2009. 326 p.

17	Technical requirements for working on the course

In order to access the course materials, you will need regular access to a computer and the Internet. In order to successfully study and pass the exam from the training course, it is necessary to constantly familiarize yourself with the materials posted on the university's remote platform (Moodle) in the course "Professional Practice of Software Engineering". You also need to create reporting documents for the performance of practical work and upload them to the platform (the platform can only be used from a corporate email account).

In the case of problems with access to the distance learning platform, it is necessary to notify the dean's office or the headmaster, or the course teacher directly.

18	Learning process

The process of studying the course "Professional Practice of Software Engineering" includes lectures and practical sessions.

During the lectures, such teaching methods as lecture, lecture-conversation, discussion, discussion of problematic issues, demonstration, and analysis of various situations will be used according to the topic of the lectures.

During practical classes, such teaching methods as surveys, testing, performance of individual tasks, performance of analytical and calculation works, solved specific problems and situations will be used).

19	Signs of discipline

Term of teaching	Semester	International Disciplinary integration	Course study	Cycles: general training/ professional training/ free choice
1 semester	7th semester	No	4ty course	Cycle of professional training

20	Evaluation policies

You will have different ways to demonstrate your knowledge and skills throughout the semester. This includes how you attend class, how and what you contribute to topic discussions, how you complete and complete lab assignments and tests on time, how you complete independent work assignments, and the ability to present your work. In addition, it is possible to perform tasks that are performed individually or in a small group in the form of a student scientific work.

Activities during the semester	Maximum number of points during the semester
Current work (attendance, supervision at lectures, completion of practical work)	32
Tests (8)	24
Performing independent work	4
Together	**60**
Credit event	**40**
TOTAL	**100**

21	Rating scale

The grade for the discipline is defined as the sum of the points scored for the current activity in the semester. Each module includes an assessment score for the student's current work. Module control activities are carried out upon completion of the study of the taught material of this module. The minimum number of points for the current educational activity, which allows the discipline to be counted as completed, must be at least 60. The maximum point for the discipline is 100.

The total grade for studying the discipline is set according to the national and European scale (EKTS).

The overall final grade in points, according to the national scale and according to the ECTS scale, is entered in the student's assessment and examination information, study card and student's assessment book.

Rating scale: national and ECTS

The sum of points for all types of educational activities	Evaluation ECTS	Evaluation on a national scale	
		for an exam, course project (work), practice	for credit
90-100	A	perfectly	Enrolled
82-89	B	good	
74-81	C		
66-73	D	satisfactorily	
60-65	E		
30-59	FX	unsatisfactory with possibility reassembly	not counted with the possibility of retaking
1-29	F	unsatisfactory with mandatory repeated sstudy of the discipline	not enrolled with mandatory repeated study of the discipline

22	How to find out your score

To check your assignment grades and read the teacher's comments, you need to check the relevant tabs on the distance learning platform (Moodle) in this course.

You can also get information about the received grades in the joint chat of the subject group (Viber or Telegram) or directly from the course instructor via corporate mail, messengers or by appointment on the days of consultations.

23	Course policies

For the productive educational and cognitive activity of the applicants when studying the discipline, thematic lectures are held and practical classes are conducted in the form of laboratory works.

In classes and during his stay at the university, the student must treat teachers, staff and other students with respect, attend classes according to the schedule, come on time and not leave the classroom without the teacher's permission. It is necessary to complete all academic tasks and their work within the specified time.

The teacher, in turn, must constantly raise his professional level, pedagogical skill, and general culture, provide conditions for students to master educational programs at the level of mandatory requirements for the content, level and scope of education, and promote comprehensive professional development of students. It is mandatory to follow the educational and thematic plan, not to be late for classes, not to allow any manifestations of corruption, discrimination, bullying, harassment and oppression of the rights of those seeking education.

Education is based on the application of active learning methods. Active participation is expected and the norm. Attendance and active participation make up 80% of the grade. A student who, for good reasons, documented, was not subject to current control has the right to undergo current control within a two-week period after returning to studies.

A student who was absent from classes without valid reasons, did not participate in current control activities, did not liquidate academic debt, is not allowed to take the final semester control of knowledge in this discipline, and on the day of the exam in the examination information by a scientific and pedagogical employee the grade "not admitted" is issued. Retaking the exam in the discipline is prescribed on the condition that all types of educational, independent (individual) work provided for in the work curriculum of the discipline are performed, and is carried out in accordance with the liquidation schedule approved by the directorate.

The academic integrity of any institution of higher education requires integrity in teaching and research, so academic integrity is required of all MEU students. Academic dishonesty is prohibited in all programs at our university. All participants in the educational process are guided by the principles of academic integrity.

24	Completing the task late, correcting grades, working out

Assignment reports must be uploaded to Moodle by the due dates specified in the course schedule. Best practice would be to complete assignments as soon as possible after receipt to allow enough time to actively participate in class. If more time is needed to complete the task, flexible deadlines are available. Completed assignments are accepted for full credit until the last class in the discipline on the schedule, after which 40% partial credit based on the grade received will be awarded within a week of the last day of class. Assignments that were not submitted at all will receive 0.

If classes are missed for more than one week due to illness or other reasons, it is necessary to contact the teacher to agree on alternative options for completing tasks. Deadlines work both ways, and meeting them ensures that your instructor provides timely feedback on your assignments to ensure you stay on course.

25	Teacher's response time (about checking assignments)

Via corporate mail (within 24 hours), via messengers (within 1-2 hours).

26	Effective communication

Effective communication is essential to success in this course, we recommend using the following channels:
Forum of questions and answers: for general course questions, you need to check the FAQ section in Moodle and then post your question in the Q&A forum to ask your colleagues or the instructor (guaranteed to receive a notification by e-mail every time a new publication or an answer to a question appears);
E-mail: have a personal question related to studying the course, write to the teacher directly;
Social networks, messengers: personal communication with classmates, teacher;
Face-to-face meeting: communication with classmates during classes and with the teacher on consultation days.

27	Policy of publication and distribution of course materials

Students may not post, publish, sell, or otherwise publicly distribute course materials without written Permission the teacher. Such materials include: lecture notes, slides (presentations) of lectures, video or audio recordings, tasks, problem sets, tests, other students' works and answers, etc. Students who sell, post, publish, or distribute course materials without written permission or otherwise may be subject to disciplinary action, up to and including withdrawal.
The use of generative AI is permitted subject to adherence to the principles of academic integrity.

28	Expected workload and involvement of students

Approximately 2-3 hours per week should be allocated to work in this course. If circumstances arise that force you to spend more time on one of the tasks, you must inform the teacher by e-mail (messenger).
An extension of the submission deadline is possible only under the condition that the teacher is informed in advance that it is impossible to submit the assignment by the specified time. Students are expected to have a backup plan in case of computer malfunctions or Internet outages.

29	Support services

Electronic schedule: https://rozklad.ieu.edu.ua
Online library: https://onlinelibrary.ieu.edu.ua
Repository: https://sed.ieu.edu.ua/index.php/sed/index
Educational Ombudsman: https://ieu.edu.ua/pro-mieu/ombudsmen

30	Course schedule

Topic name	Content of practical class
Topic 1. Introduction to disciplines. Philosophical issues of software engineering.	1. Oral survey 2. Practical Work 1. Methods of critical and creative thinking of specialists in the field of software engineering 3. Questions for self-control. Philosophical issues of software engineering. 4. Tests
Topic 2 Social questions that arise before programmers.	1. Oral survey 2. Practical Work 2. Social issues and interests in the field of software engineering. 3. Questions for self-control. Social, issues and interests that arise for programmers. 4. Tests
Topic 3. Professional and ethical responsibility of software engineering professionals.	1. Oral survey 2. Practical Work 3. Professional and ethical responsibility of software engineering professionals 3. Questions for self-control. Professional and ethical responsibility of software engineering specialists. 4. Tests
Topic 4. Software intellectual property protection in the field of software engineering.	1. Oral survey 2. Practical Work 4. Ensuring intellectual property protection in the field of software engineering; 3. Questions for self-control. Intellectual property protection in the field of software engineering. 4. Tests
Topic 5. Privacy and civil liberties.	1. Oral survey 2. Practical Work 5. Confidentiality and social freedoms s. 3. Questions for self-control. Privacy, public and freedoms in the field of software engineering.. 4. Tests
Topic 6. Computer crimes and related question.	1. Oral survey 2. Practical Work 6. Computer crimes and economic issues related to the use of viruses; 3. Questions for self-control. Computer crimes, economic issues. 4. Tests
Topic 7. The nature and role of professional societies.	1. Oral survey 2. Practical Work 7. Professional practice of software engineering; 3. Questions for self-control. The nature of societies in the. field of software enthgein professional studies. 4. Tests
Topic 8. Professional activities of a software engineer.	1. Oral survey 2. Practical Work 8. Professional activity of a software engineer; 3. Questions for self-control. Professional activities of a software engineer 4. Tests

31	Tips for successful study

The goal is unique to everyone, but its correct setting greatly affects the result, as well as the learning process. For example,

- processing the materials of the theoretical component (lectures) of the discipline will provide insight and knowledge about the
- development process and the architecture of the OS itself, and the implementation of the practical component - the acquisition
- of practical skills in the use of methods and tools for creating system software. After all, any training that follows a clear plan and
- with a serious attitude to the material will always be successful.

So, if you want to successfully master this subject, you must be:

- persistent, attentive and inquisitive;
- creative and cheerful, open to communication and discussions
- ready to receive information and knowledge on the subject not only during lectures, but also during extracurricular hours

See you soon!