The syllabus of the discipline

Project management

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Field name	Detailed content, comments
Name of the faculty	Faculty of Infocommunications
Level of higher education	Second (master's)
Code and name of the specialty	172 Telecommunications and radio engineering
Type and name of educational program	ESP, EPP "Information and Network Engineering"
Name of the discipline	Project management
Number of ECTS credits	5
Discipline structure (distribution by types and hours of study)	30 hours - 15 lectures, 20 hours - 4 laboratory classes, 10 hours - 5 consultations, 90 hours - independent work, **type of control:** comb. exam
Schedule (terms) of studying the discipline	2-nd year, III semester
Prerequisites for studying the discipline	Basic concepts of disciplines 1. Technologies of data processing in IC 2. Discrete mathematics 3. Telecommunication theory 4. Basics of information and communication technologies
Competences, knowledge, skills, understanding, which is acquired by the applicant in higher education in the learning process	be able to apply management principles; to structure the project according to the component works, to analyze the data on the organization of project planning; choose and apply methods for splitting a project; use software products for project management. Possess knowledge of IT project management skills.
The quality of the educational process	Educational-methodical and material-technical resource provision of the educational program, within the framework of which the discipline is studied, meets the licensing requirements and accreditation conditions of the educational activity of the university. Annual monitoring and revision of the curriculum of the discipline in accordance with the requirements and recommendations of the Ministry of Education and Science, state certification of acquired competencies of graduates, standards of cooperation with employers to ensure a competitive level of training. Adherence to the principles of academic integrity (https://lib.nure.ua/plagiat). Contains public information on the requirements, competencies, level of education within the current educational program.

Description and content of the discipline

According to the qualification requirements for higher education in specialty 172 "Telecommunications and Radio Engineering", the purpose of the discipline is to prepare students to perform project management functions in the field of IT and team work on projects.

Content

Content module 1.
Topic 1. Introduction. Fundamentals of project management.
Topic 2. Project life cycle.
3. Development of the project.
Topic 4. Network planning. Gantt charts.
5. Control and regulation of the project.
Content module 2.
Topic 6. Agile methodology.
Topic 7. Project cost management.
Topic 8. Project resource management.
Topic 9. Assessment of the state of work and forecasting of shifts.
Topic 10. Risk management.
Topic 11. Analysis of the project upon completion.

Learning outcomes of higher education

As a result of studying the discipline, students must:

know: basic concepts and definition of project management theory; main phases of the project life cycle; rules, main types and stages of project structuring; rules and methods of network planning; principles and methods of control over the effective functioning of projects; basic inventory management systems; principles of quantitative risk analysis and methods of risk mitigation; fundamentals of the quality management system.

be able to: apply management principles; to structure the project according to the component works, to analyze the data on the organization of project planning; choose and apply methods for splitting a project; use software products for project management.

formed competencies: knowledge of project management skills in IT.

Assessment system according to each task for passing the test / exam.

When evaluating a student's work during the semester, the final rating $O_{сем}$ is calculated as the sum of grades for different types of classes and control activities.

Type of lesson / control measure	Rating
Lb № 1	8
Lb № 2	8
Lectures 1-9	18
Abstract	14
Checkpoint 1	48
Lb № 3	8
Lb № 4	8
Lb № 5	8
Lectures 10-15	12
Abstract	16
Checkpoint 2	52
Total for the semester	100

The form of final control for the discipline is a combined exam. A student receives admission to the exam if during the semester the student received at least 60 points in the 100-point system for all control activities.
The final grade is calculated as the sum of the grade for the semester weighing 0.6 and the grade for the exam weighing 0.4.

Qualitative evaluation criteria in the national scale and ECTS

Satisfactory, D, E (60-74). Show the required minimum of theoretical knowledge. Know the ways and methods of solving practical problems and be able to use them in practice.
Good, C (75-89). Firmly know a minimum of theoretical knowledge. Demonstrate the ability to solve a practical problem and justify all stages of the proposed solution.
Excellent, A, B (90-100). Show complete knowledge of basic and additional theoretical material. Unmistakably solve a practical problem, explain and justify the chosen method of solution.

Assessment scale: national and ECTS

The sum of points for all types of educational activities	ECTS assessment	Score on a national scale	
		for exam, course project (work), practice	for offset
90 – 100	**A**	perfectly	credited
82-89	**B**	fine	
74-81	**C**		
64-73	**D**	satisfactorily	
60-63	**E**		
35-59	**FX**	unsatisfactory with the possibility of reassembly	not credited with the possibility of re-assembly
0-34	**F**	unsatisfactory with mandatory re-examination	not credited with compulsory re-study of the discipline

Methodical support

1. Petrovych Y. M. Upravlinnia innovatsiinymy proektamy : navch. posib. / Y. M. Petrovych, I. I. Novakivskyi ; M-vo osvity i nauky Ukrainy, Nats. un-t "Lvivska politekhnika". – Lviv : Vyd-vo Lviv. politekhniky, 2016. – 316 s.

2. Tarasiuk H. M. Upravlinnia proektamy : navch. posib. dlia stud. vyshch. navch. zakl. / H. M. Tarasiuk. – 3-tie vyd. – Kyiv : Karavela, 2015. – 320 s.

3. Polkovnykov A. V. Upravlenye proektamy. Polnыi kurs MVA / A. V. Polkovnykov, M. F. Dubovyk. – Moskva : Olymp-Byznes, 2016. – 552 s.

4. A Guide to the Project Management Body of Knowledge. – 6-th ed. – Newtown Square : Project Management Institute, Inc., 2017. – 756 p.

5. Pykhler R. Upravlenye produktom v Scrum. Agile-metodы dlia vasheho byznesa : per. s anhl. / R. Pykhler. – Moskva : Mann, Yvanov y Ferber, 2017.– 240 s.

6. Stellman Э. Postyhaia Agile. Tsennosty, pryntsыpы, metodolohyy : per. s anhl. / Э. Stellman, Dzh. Hryn. – Moskva : Mann, Yvanov y Ferber, 2017.

7. Kupershtein V. Samouchytel Microsoft Project 2013 v upravlenyy proektamy / V. Kupershtein. – Sankt-Peterburh : BKhV-Peterburh, 2014. – 432 s.

8. Niuton R. Upravlenye proektamy ot A do Ya : per. s anhl. / R. Niuton. – 6-e yzd. – Moskva : Alpyna Pablysher, 2014. – 180 s.

9. Kon M. Scrum: hybkaia razrabotka PO. Opysanye protsessa uspeshnoi hybkoi razrabotky prohrammnoho obespechenyia s yspolzovanyem Scrum : per. s anhl. / M. Kon. – Moskva : Vyliams, 2016. – 576 s. : yl.

10. S.M. Iievlieva, D.O. Rudenko. Osnovy upravlinnia proektamy: navch. posibnyk dlia studentiv usikh form navchannia spetsialnostei: 122 – Kompiuterni systemy ta informatsiini tekhnolohii; 124 – Systemnyi analiz; 113 – Prykladna matematyka. – Kharkiv: KhNURE, 2017. – 224 s.

11. Kompleks navchalno-metodychnoho zabezpechennia navchalnoi dystsypliny "Upravlinnia IT-proektamy" pidhotovky bakalavra napriamu 6.050101 - Kompiuterni nauky [Elektronnyi resurs] / KhNURE; rozrob. M. V. Yevlanov. – Kharkiv, 2017. – 192 s.

12. Kompleks navchalno-metodychnoho zabezpechennia navchalnoi dystsypliny "Upravlinnia proektam", pidhotovky - pershyi kurs druhoho rivnia vyshchoi osvity, spetsialnist 124 - Systemnyi analiz, spetsializatsiia "Systemnyi analiz ta upravlinnia" [Elektronnyi resurs] / KhNURE; rozrob. S. M. Iievlieva. – Kharkiv, 2017. – 68 s.

13. Kompleks navchalno-metodychnoho zabezpechennia navchalnoi dystsypliny "Upravlinnia proektamy" pidhotovky bakalavra, spetsialnist 122 - Kompiuterni nauky [Elektronnyi resurs]: spetsializatsiia "Informatyka" / KhNURE; rozrob. O. I. Sinelnikova. – Kharkiv, 2017. – 129 c.

Links to electronic sources

1. http://lib.nure.ua/enmk.