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|  | **Course Syllabus** |

**1.** **Course Title:**

**2. Academic Level:**

Master

IT-Project Management

**3. ECTS Credits:**

5 ECTS

**4. Semester:**

2, spring semester

**5. School/Department:**

Institute of Computer Technologies and Information Security

**6. Location:**

Bulding “G”, 347928, 44 Nekrasovsky Lane, Taganrog

**7. Instructor:**

Associate Prof. Dmitry Bespalov, email: dabespalov@sfedu.ru

**8. Language of Instruction:**

English

**9. Course Description:**

The main stages of project management in the fields of software engineering, system analysis and management, information systems, applied mathematics and computer science, and tools for their implementation are the basis for setting tasks and selecting the content of the discipline. The main tasks of mastering the discipline are: formation of undergraduates' ideas about the models and phases of the life cycle of projects in the field of computer and information technology, from the stage of project initiation to the stage of implementation and maintenance; development of skills in implementing the main processes of IT project management (initiation, planning, execution, monitoring and management); formation of a system of knowledge about the methods of managing resources and parameters of an IT project (content, timing, risks, quality, cost); formation of a system of knowledge about the purpose and application of flexible methodologies for IT project management; formation of the ability to use modern project management tools and systems to implement the main processes of IT project management; the formation of the ability to analyze the effectiveness of an IT project at all stages of its life cycle.

**10. Course Aims:**

The discipline is designed to form students' knowledge and skills that serve as the basis of readiness for the practical implementation of effective IT project management processes in scientific and professional activities, to meet the needs of employers in personnel who understand the content of IT project management processes in the field of computer and information technology and possess the necessary system of methodological knowledge for their implementation.

**11. Specific entry requirements (if any):**

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**12. Course Content:**

**Module 1.** IT Project Management Concept

Project management concept

Modern concept of IT project management, global project management practices, including in the field of artificial intelligence

**Module 2.** Fundamentals of effective project management.

Fundamentals of effective project management.

Project development. The life cycle of the project.

Development of the project concept and evaluation of its effectiveness.

Methods for evaluating the effectiveness of the project.

Project planning.

Project schedule management. Project risks.

**Module 3.** Practical aspects of IT project management

Project cost estimation according to various criteria. Legal and ethical norms and rules of project management.

Methodology of project cost management. Business analytics in project management.

Project structuring and documentation development.

Preparation, technical support and management of project parameters.

Project quality management.

Methods of analyzing the effectiveness of the IT project execution.

Implementation of the project schedule. Time tracking tools for each employee.

Organization and formation of the project team. Team strategies. Project team management. Flexible methodologies.

Project support tools. Methods of business communication.

**13. Intended Learning Outcomes:**

Knowledge and skills of managing IT projects of various scales, the ability to use technical tools, competently apply methodologies and approaches in professional activities.

**14. Learning and Teaching Methods:**

Lectures, practical classes and workshops

**15. Methods of Assessment/Final assessment information:**

Assessment methods: interpretation, discussion, translation, test, reports, essays. Summative Assessment method: differentiated credit

**16. Reading List:**

1. Grekul V. I., Korovkina N. L., Kupriyanov Yu. V. Methodological foundations of IT project management: textbook. - M: Internet University of Information Technologies, 2010.–392s. URL: https://biblioclub.ru/index.php?page=book\_red&id=233070

2. Yekhlakov Yu. P. Software project management: textbook. – Tomsk: Tomsk State University of Control Systems and Radioelectronics, 2015.– 217c. URL: https://biblioclub.ru/index.php?page=book\_red&id=480634

3. Kalentyev A. A., Garais D. V., Goryainov A. E. New technologies in programming: a textbook. – Tomsk: Tomsk State University of Control Systems and Radioelectronics, 2014.– 176c. URL: https://biblioclub.ru/index.php?page=book\_red&id=480503

4. Preobrazhenskaya T. V., Murtazina M. Sh., Aletdinova A. A. Project management: a textbook. – Novosibirsk: Novosibirsk State Technical University, 2018. – 123 p. URL: https://biblioclub.ru/index.php?page=book\_red&id=574957