

Документ подписан  
Информация о владельце:  
ФИО: Ястребов Олег Александрович  
Должность: Ректор  
Дата подписания: 29.06.2022 17:37:51  
Уникальный программный ключ:  
ca953a0120d891083f939673078ef1a989dae18a

**Federal State Autonomous Educational Institution of Higher Education  
Peoples' Friendship University of Russia**

**Engineering Academy**

name of the main educational unit

**PRACTICE PROGRAM**

**Pre-diploma**

(наименование практики)

**Production**

(type of practice: educational, production)

For the direction of training

**27.04.05 Innovations Study**

(Code and name of the direction of training)

Practical training of students is carried out as part of the implementation of the main professional educational program of higher education (ОП ВО)

**Innovation Management**

(Name (orientation/profile ОП ВО))

Form of study: **full-time**

## 1. PURPOSE OF THE PRACTICE

The goals of the practice are to consolidate the knowledge gained by students in the learning process, the formation of skills and abilities in the field of organization and management of innovative activities of the enterprise, the collection and analysis of scientific and technical, economic-technical and marketing information necessary for writing a final qualification work (BKP) and the implementation of professional activities in the direction of training.

The objectives of the practice are:

- collection and analysis of data for writing the final qualification work (BKP);
- formation of students' general idea of future professional activity, familiarization with the general requirements for a specialist;
- study of methods and tools of innovation management in a modern organization;
- consolidation of knowledge and development of skills in the field of technical and economic evaluation of an innovative project and / or the technology being created;
- development of skills in collecting, summarizing and analyzing technical, managerial, financial and economic, marketing information to solve professional problems in the implementation of an innovative project and / or the implementation of innovation;
- development of skills and abilities to work with applied software, databases and modern computer equipment to solve the problems of implementing an innovative project and / or innovation;
- acquisition of skills and development of skills in teams for the implementation of innovative and / or research projects in the framework of solving business problems of the organization.

## 2. REQUIREMENTS FOR THE RESULTS OF TRAINING BASED ON THE RESULTS OF THE INTERNSHIP

The practice is aimed at the formation of the following competencies (parts of competencies) among students:

*Table 2.1. The list of competencies formed in students during the practice (learning outcomes based on the results of practice)*

Competence code	Name of competence	Indicators of competence achievement (within the framework of this practice)
ПК-1	Being able to organize the work of a creative team to achieve a scientific goal, find and make managerial decisions, evaluate the quality and effectiveness of labor, costs and results of the scientific and production team	ПК-1.1. Demonstrate knowledge of the key principles of creative team management ПК-1.2. Use tools for assessing the quality and effectiveness of work
ПК-2	Being able to find (choose) optimal solutions when creating new high-tech products, taking into account the requirements of quality, cost, completion time, competitiveness and environmental safety	ПК-2.1. Demonstrate knowledge of assessing the quality, cost and competitiveness of an innovative product or service ПК-2.2. Use environmental safety assessment methods
ПК-3	Being able to develop a plan and program for the organization of innovative activities of the research and production unit, to carry out a feasibility study of innovative projects and programs	ПК-3.1. Use the methods of technical and economic design of innovative productions ПК-3.2. Develop a plan and program for organizing innovation activities

## 3. THE PLACE OF PRACTICE IN THE STRUCTURE OF EDUCATIONAL PROGRAM OF HIGHER EDUCATION OII BO

Practice refers to the variable component of the mandatory part of block 2 of the curriculum.

Within the framework of the educational program OII BO, students also master other disciplines and practices that contribute to achieving the planned learning outcomes based on the results of practical training

Table 3.1. The list of components of the educational support OII BO, contributing to the achievement of the planned learning outcomes based on the results of the internship

Competence code	Name of competence	Previous disciplines/practices*	Subsequent disciplines/practices*
IIK-1	Being able to organize the work of a creative team to achieve a scientific goal, find and make managerial decisions, evaluate the quality and effectiveness of labor, costs and results of the scientific and production team	Innovative HR management technologies Introductory practice Organizational and Managerial Practice	Pre-diploma practice Preparation and process of passing the state exam Execution, preparation for the defense procedure and defense of the final qualification work
IIK-2	Being able to find (choose) optimal solutions when creating new high-tech products, taking into account the requirements of quality, cost, completion time, competitiveness and environmental safety	Management of operational activities of high-tech industries Strategic controlling in an innovative enterprise Environmental management in innovative enterprises Economics of high-tech industries/ Innovative technologies of environmental management in industries Marketing of innovative products Supply Chain Management in an Innovative Enterprise Evaluation of the effectiveness of innovation and investment projects / International scientific and technical cooperation Introductory practice Organizational and Managerial Practice	Pre-diploma practice Preparation and process of passing the state exam Execution, preparation for the defense procedure and defense of the final qualification work
IIK-3	Being able to develop a plan and program for the organization of innovative activities of the research and production unit, to carry out a feasibility study of innovative projects and programs	Big Data Processing Management of operational activities of high-tech industries Programming technologies for innovative industries Digital technologies of innovative production Strategic controlling in an innovative enterprise Operational controlling in an innovative enterprise Introductory practice Organizational and Managerial Practice	Pre-diploma practice Preparation and process of passing the state exam Execution, preparation for the defense procedure and defense of the final qualification work

\* - in accordance with the matrix of competencies and CVII OII BO

#### 4. SCOPE OF PRACTICE

The total labor intensity of the practice is 6 credit units (216 academic hours).

## 5. СОДЕРЖАНИЕ ПРАКТИКИ

Таблица 5.1. Содержание практики\*

Name of the practice section	Contents of the section (topics, types of practical activities)	Labor intensity, ac. h
Organizational and preparatory	Issuance by the head of the practice of individual tasks for practice	2
	Conducting an organizational meeting with students by the head of the practice and initial instruction of students on safe working conditions and fire safety rules during the internship	2
Principal	studying the current state of the final qualification work BKP issues: literature review – selection and study of literature sources	80
	Analysis, processing and systematization of the material collected during the internship: assessment of the current state of the WRC problems, substantiation of the relevance of the WRC topic, definition of the goals and objectives of the study, formation of the theoretical and methodological base of research	70
Reporting	Preparation of the internship report	40
	Preparation and process of defending the practice report	22
Altogether:		216

\* - the content of the practice by sections and types of practical training is FULLY reflected in the student's report on the practice

## 6. MATERIAL AND TECHNICAL SUPPORT OF THE PRACTICE

To conduct the practice, classrooms equipped with specialized furniture, computerized workplaces, office equipment (projector, projector screen, printer / MFP, etc.), Internet access and software (Microsoft Windows operating system, office application package, including MS Office / Office 365, Teams, Skype) are used.

During the internship in a specialized organization, for meetings, consultations and interviews with students, as well as for independent work of students, premises are used that are equipped, similar to the above-mentioned classrooms, as well as the household premises, industrial equipment and devices necessary for the practice.

The above means of logistics of practice must pass the necessary verification (licensing, certification, attestation, verification) and must comply with sanitary and fire safety standards, as well as safety rules and measures, incl. when working with certain production / laboratory equipment.

## 7. METHOD OF PRACTICE

The method of conducting the practice is stationary.

Practice is carried out in the Department of Innovation Management in Industries of the RUDN University Academy of Engineering. By decision of the head of the educational program of higher education, practice can also be carried out in specialized organizations in Moscow on the basis of an agreement on the practical training of students.

The terms of the internship correspond to the period specified in the calendar educational schedule of the educational program of higher education ОП ВО, and can be changed in coordination with the RUDN university educational policy department and the department for the organization of practices and employment of students in RUDN University.

## 8. EDUCATIONAL-METHODOLOGICAL AND INFORMATION SUPPORT OF PRACTICE

*Main literature:*

1) Брусакова И.А. Теоретическая инноватика. Учебник и практикум для бакалавриата и магистратуры под ред. И.А. Брусаковой / М.: Издательство Юрайт, 2019. 333 стр. Электронный ресурс. URL: / <https://urait.ru/book/teoreticheskaya-innovatika-473047>

2) Богомолова А.В. Управление инновациями: учебное пособие / Томск: Томский государственный университет систем управления и радиоэлектроники. 2012. 144 с. ISBN 978-5-4332-0048-7. Электронный ресурс. URL: <http://biblioclub.ru/index.php?page=book&id=208962>

3) Винокурова Д.Ю. Инноватика как наука / Международный журнал гуманитарных и естественных наук. 2016. Электронный ресурс. URL: <http://intjournal.ru/innovatika-kak-nauka/>

4) Волкова В.Н., Э.А. Козловская, А.В. Логинова и др. Применение теории систем и системного анализа для развития теории инноваций: монография под ред. В.Н. Волковой, Э.А. Козловской / Санкт-Петербург: Издательство Политехнического университета. 2013. 352 с. Электронный ресурс. URL: [http://biblioclub.ru/index.php?page=book\\_red&id=363043](http://biblioclub.ru/index.php?page=book_red&id=363043)

5) Игошев Б.М., Усольцев А.П. История технических инноваций: учебное пособие / Москва; Берлин: Директ-Медиа. 2015. 351 с. Электронный ресурс. URL: ISBN 978-5-4475-3068-6. Электронный ресурс. URL: <http://biblioclub.ru/index.php?page=book&id=272956>

6) Леонова М.В., Шинкевич А.И. Диффузия инноваций: модели и технологии управления: монография / Казань: Издательство КНИТУ, 2014. 163 с.: ISBN 978-5-7882-1659-1. Электронный ресурс. URL: <http://biblioclub.ru/index.php?page=book&id=428034>

7) Райская, М.В. Теория инноваций и инновационных процессов: учебное пособие / Казань: Издательство КНИТУ. 2013. 273 с. Электронный ресурс. URL: <http://lib.rudn.ru/Web/BiblioSearch?query=>

8) Бабич В.Н., Кремлёв А.Г. Инновационная модель бизнес-процесса: учебное пособие / Екатеринбург: Издательство Уральского университета. 2014. 185 с.: ISBN 978-5-7996-1220-7. Электронный ресурс. URL: <http://lib.rudn.ru/Web/BiblioSearch?query=>

9) Шляхтиченко Ю.В., Галимова М.П. Бизнес-модели в инноватике. Инновационная экономика: перспективы развития и совершенствования / Издательство: ЗАО «Университетская книга». 2018. Вып. 8 (34). С. 393-398. Электронный ресурс. URL: [elibrary.ru/item.asp?id=36929097](http://elibrary.ru/item.asp?id=36929097)

#### *Further reading:*

1) Латов Ю.В., Латова Н.В. Российская технологическая инноватика в отечественных СМИ (на примере технопарков) / Мир России. Социология. Этнология. Издательство: Федеральное государственное автономное образовательное учреждение высшего образования «Национальный исследовательский университет «Высшая школа экономики», 2018. Вып. 4. Т. 27, С. 141-162. Электронный ресурс. URL: <https://cyberleninka.ru/article/n/rossiyskaya-tehnologicheskaya-innovatika-v-otechestvennyh-smi-na-primere-tehnoparkov/viewer>

2) Мясникова О.Ю., Сопилко Н.Ю. Экономический анализ / М.: РУДН. 2019. 129 с. Электронный ресурс. URL: <https://elibrary.ru/item.asp?id=37228769>

3) Плохих Ю.В., Храпова Е.В., Кулик Н.А. и др. / Промышленные технологии и инновации: учебное пособие / Омск: Издательство ОмГТУ, 2017. 139 с. Электронный ресурс. URL: [https://www.omgtu.ru/general\\_information/institutes/institute-of-design-and-technology/faculty-of-economics-and-service-technologies/the-department-of-economics-and-management/Izdaniya/%D0%9F%D0%BB%D0%BE%D1%85%D0%B8%D1%85%20%D0%AE.%20%D0%92.,%20%D0%9A%D1%83%D0%BB%D0%B8%D0%BA%20%D0%9D.%D0%90.,%20%D0%A5%D1%80%D0%B0%D0%BF%D0%BE%D0%B2%D0%B0%20%D0%95.%D0%92.,%20%D0%A5%D0%B0%D1%80%D0%B8%D0%BD%D0%B0%20%D0%9B.%D0%98.,%20%D0%A7%D0%B8%D0%B6%D0%B8%D0%BA%20%D0%92.%D0%9F.%20%D0%9F%D1%80%D0%BE%D0%BC%D1%8B%D1%88%D0%BB%D0%B5%D0%BD%D0%BD%D1%8B%D0%B5%20%D1%82%D0%B5%D1%85%D0%BD%D0%BE%D0%BB%D0%BE%D0%B3%D0%B8%D0%B8%20%D0%B8%20%D0%B8%D0%BD%D0%BD%D0%BE%D0%B2%D0%B0%D1%86%D0%B8%D0%B8.pdf](https://www.omgtu.ru/general_information/institutes/institute-of-design-and-technology/faculty-of-economics-and-service-technologies/the-department-of-economics-and-management/Izdaniya/%D0%9F%D0%BB%D0%BE%D1%85%D0%B8%D1%85%20%D0%AE.%20%D0%92.,%20%D0%9A%D1%83%D0%BB%D0%B8%D0%BA%20%D0%9D.%D0%90.,%20%D0%A5%D1%80%D0%B0%D0%BF%D0%BE%D0%B2%D0%B0%20%D0%95.%D0%92.,%20%D0%A5%D0%B0%D1%80%D0%B8%D0%BD%D0%B0%20%D0%9B.%D0%98.,%20%D0%A7%D0%B8%D0%B6%D0%B8%D0%BA%20%D0%92.%D0%9F.%20%D0%9F%D1%80%D0%BE%D0%BC%D1%8B%D1%88%D0%BB%D0%B5%D0%BD%D0%BD%D1%8B%D0%B5%20%D1%82%D0%B5%D1%85%D0%BD%D0%BE%D0%BB%D0%BE%D0%B3%D0%B8%D0%B8%20%D0%B8%20%D0%B8%D0%BD%D0%BD%D0%BE%D0%B2%D0%B0%D1%86%D0%B8%D0%B8.pdf)

4) Хайруллина М.В., Горевая Е.С. Управление инновациями: организационно-экономические и маркетинговые аспекты: монография / Новосибирск: Издательство НГТУ. 2015. 308 с. ISBN 978-5-7782-2722-4. Электронный ресурс. URL: <http://biblioclub.ru/index.php?page=book&id=438354>

5) Карзанова И.В. Открытые инновации как движущая сила инновационной деятельности компаний = Open innovation as a driver of innovation activity of companies: учебно-методическое пособие на английском языке / М.: РУДН. 2018. 24 с. ISBN 978-5-209-08376-4. Электронный ресурс. URL: <http://lib.rudn.ru/Web/BiblioSearch?query=>

#### *Resources of the information and telecommunication network "Internet":*

1) Electronic library system (EBS) of RUDN University and third-party EBS, to which university students have access on the basis of concluded contracts:

- ЭБС РУДН <http://lib.rudn.ru/MegaPro/Web>
- ЭБС «Университетская библиотека онлайн» <http://www.biblioclub.ru>
- ЭБС «Юрайт» <http://www.biblio-online.ru>

- ЭБС «Консультант студента» [www.studentlibrary.ru](http://www.studentlibrary.ru)
  - ЭБС «Лань» <http://e.lanbook.com/>
  - ЭБС «Троицкий мост»
- 2) Databases and search engines:
- electronic fund of legal and normative-technical documentation <http://docs.cntd.ru/>
  - Yandex search engine <https://www.yandex.ru/>
  - Google search engine <https://www.google.ru/>
  - abstract database SCOPUS <http://www.elsevierscience.ru/products/scopus/>

*Specialized program support:*

The use of specialized software is not provided.

*Educational and methodical materials for internship, filling out a diary and issuing a report on practice\*:*

- 1) Rules of safe working conditions and fire safety during practical training (primary instruction).
- 2) Methodological recommendations for filling out a diary for students and preparing a practice report.

\* - all educational and methodological materials for internship are posted in accordance with the current procedure on the page of practice in TUIS

## **9. EVALUATION MATERIALS AND SCORE-RATING SYSTEM FOR ASSESSING THE LEVEL OF FORMATION OF COMPETENCES ON THE RESULTS OF PRACTICE**

Assessment materials and a point-rating system\* for assessing the level of formation of competencies (part of competencies) based on the results of the internship are presented in the Appendix to this Internship Program.

\* - ОМ и БРС are formed on the basis of the requirements of the relevant local regulatory act of the RUDN University

### **Educational designer:**

Associate Professor, Ph.D



E. A. Kovaleva

### **Director of innovation management in industries department**



O.E. Samusenko

### **Head of EP HE:**

Associate Professor, Ph.D



Yu. A. Nazarova