МИНОБРНАУКИ РОССИИ

Федеральное государственное автономное образовательное учреждение высшего образования "Пермский государственный национальный исследовательский университет"

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Программа учебной практики

INTRODUCTORY PRACTICE

Код УМК 99990

Утверждено
Протокол №9
от «06» июня 2022 г.

Пермь, 2022

1. Вид практики, способ и форма проведения практики

Вид практики **учебная**

Тип практики **технологическая (проектно-технологическая) практика**

Способ проведения практики **стационарная, выездная**

Форма (формы) проведения практики **дискретная**

2. Место практики в структуре образовательной программы

Учебная практика « Introductory practice » входит в обязательную часть Блока « Б.2 » образовательной программы по направлениям подготовки (специальностям):

Направление: **38.03.05** Бизнес-информатика

направленность Информационные системы и большие данные

Цель практики :

To form an idea of the organization, its problems within the framework of the topic of the WRC, to determine the information base for writing the WRC and solutions to the problem

Задачи практики :

development and consolidation of practical skills in performing domain analysis:

-checking the relevance of the topic of the final qualifying work;

-collection and processing of analytical data on the topic of WRC;

-practical implementation of methods for solving the problem of WRC;

-development of practical skills in the preparation of reports on the work done;

-development of interest in research activities.development of practical skills in the preparation of reports on the work done;

-development of interest in research activities.

3. Перечень планируемых результатов обучения

В результате прохождения практики **Introductory practice** у обучающегося должны быть сформированы следующие компетенции:

38.03.05 Бизнес-информатика (направленность : Информационные системы и большие данные)

ПК.2 Способен к анализу, обоснованию и выбору решения на основе бизнес-анализа информации с использованием информационных технологий

Индикаторы

ПК.2.2 Определяет связи и зависимости между элементами информации бизнес-анализа в соответствии с выбранными подходами с применением информационных технологий в объеме, необходимом для целей системного анализа

4. Содержание и объем практики, формы отчетности

Introductory practice is a type of student activity focused on preliminary professional and practical training of students and the formation of competencies necessary for subsequent preparation and passing the final state certification. For successful internship, students use the knowledge and skills formed in the course of studying the disciplines of the curriculum cycles. The practice is managed by the student's supervisor

Направление подготовки	38.03.05 Бизнес-информатика (направленность: Информационные системы и большие данные)
форма обучения	очная
№№ триместров, выделенных для прохождения практики	2
Объем практики (з.е.)	3
Объем практики (ак.час.)	108
Форма отчетности	Экзамен (2 триместр)

Примерный график прохождения практики

Количество часов	Содержание работ	Место проведения
Organizational and introductory stage		
54	Familiarization with the areas of activity of the organization and with the organizational and staff structure of the profile organization	Organization-practice base, PSNRU
Preparation and protection of the report		
54	Collection and generalization of the material necessary for the preparation of accounting documents on practice	Organization-practice base, PSNRU

5. Перечень учебной литературы, необходимой для проведения практики

Основная

1. Valentina Janev. Knowledge Graphs and Big Data Processing / Valentina Janev, Damien Graux, Hajira Jabeen, Emanuel Sallinger // — 2020. — 209 p. — ISBN978-3-030-53199-7. [Электронный ресурс]. https://link.springer.com/book/10.1007/978-3-030-53199-7

Дополнительная

1. Vladik Kreinovich, Songsak Sriboonchitta, Nopasit Chakpitak. Predictive Econometrics and Big Data. Springer, Cham, 2018. eBook ISBN 978-3-319-70942-0. Текст электронный. https://link.springer.com/book/10.1007/978-3-319-70942-0

6. Перечень ресурсов сети «Интернет», требуемых для проведения практики

При прохождении практики требуется использование следующих ресурсов сети «Интернет» :
https://stekspb.ru/blog/it-menedgment/?ysclid=lecqlz9uqs381499560 IT management course

7. Перечень информационных технологий, используемых при проведении практики

Образовательный процесс по практике **Introductory practice** предполагает использование следующего программного обеспечения и информационных справочных систем:

1) on-line access to the Electronic Library System (EBS);
2) access to the electronic information and educational environment of the university;
3) internet services and electronic resources.

List of necessary licensed and (or) freely distributed software:
1. Applications that allow you to view and play the media content of PDF files;
2. Office Application packages;
3. SPS "Consultant-Plus"

При освоении материала и выполнения заданий по дисциплине рекомендуется использование материалов, размещенных в Личных кабинетах обучающихся ЕТИС ПГНИУ (**student.psu.ru**).

При организации дистанционной работы и проведении занятий в режиме онлайн могут использоваться:

система видеоконференцсвязи на основе платформы BigBlueButton (https://bigbluebutton.org/).

система LMS Moodle (http://e-learn.psu.ru/), которая поддерживает возможность использования текстовых материалов и презентаций, аудио- и видеоконтент, а так же тесты, проверяемые задания, задания для совместной работы.

система тестирования Indigo (https://indigotech.ru/).

8. Описание материально-технической базы, необходимой для проведения практики

Independent work is an auditorium for independent work, equipped with computer equipment with the ability to connect to the Internet, provided with access to the electronic information and educational environment of the university. Premises of the Scientific Library of PSNIU.

Current control and intermediate certification – an audience equipped with presentation equipment (projector, screen, computer/laptop) with appropriate software, chalk(s) or marker board

During the internship in specialized organizations (specialized structural divisions of the organization), the material and technical base is determined by the organization

Помещения научной библиотеки ПГНИУ для обеспечения самостоятельной работы обучающихся:

1. Научно-библиографический отдел, корп.1, ауд. 142. Оборудован 3 персональными компьютера с доступом к локальной и глобальной компьютерным сетям.

2. Читальный зал гуманитарной литературы, корп. 2, ауд. 418. Оборудован 7 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

3. Читальный зал естественной литературы, корп.6, ауд. 107а. Оборудован 5 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

4. Отдел иностранной литературы, корп.2 ауд. 207. Оборудован 1 персональным компьютером с доступом к локальной и глобальной компьютерным сетям.

5. Библиотека юридического факультета, корп.9, ауд. 4. Оборудована 11 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

6. Читальный зал географического факультета, корп.8, ауд. 419. Оборудован 6 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

Все компьютеры, установленные в помещениях научной библиотеки, оснащены следующим

программным обеспечением:
   Операционная система ALT Linux;
   Офисный пакет Libreoffice.
   Справочно-правовая система «КонсультантПлюс»

9. Методические указания для обучающихся по прохождению практики

According to the results of the pre-graduate practice, a set of documents is provided:
1) A practice report, which is a student's document reflecting the work he has done during practice, the skills and abilities he has acquired, and the competencies he has formed. (The title page of the report is given in Appendix 1, the contents of the report – Appendix 2, the design of the report – Appendix 3);
2) Practice Diary (Appendix 8).
Structure of the report

1. Title page
2. Content
3. Introduction
4. The content part.
5. Conclusion (including self-assessment of competence formation)
In conclusion, the student objectively reflects the results of the internship, the goals achieved, the tasks solved.
6. References
7. Applications (graphs, diagrams, tables, algorithms, illustrations, etc.).

The title page should be designed according to the model (Appendix 1).
The content includes an introduction, the name of sections, subsections, paragraphs and conclusions, indicating the pages from which these elements of the report begin.
The introduction formulates the goals and objectives of the practice, gives an assessment of the current state of the research problem, the basis for the development of the research topic, its relevance and novelty, a list of the main works and tasks performed in the course of practice, methodological prerequisites for research, object, subject, purpose and objectives of the study. The structure of the work (a brief description of the content of the chapters).
Peculiarities of organizing and conducting internships for students with disabilities and persons with disabilities

Practice for students with disabilities and persons with disabilities (hereinafter - HIA) is organized and conducted taking into account their educational needs.
Students with disabilities can undergo practice both together with other students (in the study group), and individually (at personal request).
The choice of places of practice for persons with disabilities and persons with disabilities is carried out taking into account the requirements of their accessibility for this category of students. When determining the place of internships for disabled persons and persons with disabilities, the recommendations of the medical and social expert assessment, reflected in the individual disabled person rehabilitation program (if available), regarding the recommended conditions and types of work are taken into account. If necessary, special workplaces are created for internships, in accordance with the nature of the impairment, as well as taking into account the work functions performed by students with disabilities, the types of professional activity, and the nature of the work.
Trainees of this category can pass practice in the profile organizations (enterprises, institutions), defined for the study group, in which they are trained, if it does not create difficulties for them in passing practice and mastering the practice program.
If there are necessary conditions for mastering the internship program and performing an individual task (or the

possibility of creating such conditions) the internship of students of this category can be carried out in the structural divisions of PSU.

When determining the place of practice for students with disabilities and persons with disabilities, special attention shall be paid to workplace safety and equipment (equipment). Workplaces provided by an enterprise (organization, institution) must (if possible) meet the following requirements:

for visually impaired visually impaired: equipping a special workplace with general and local lighting, providing an unobstructed presence of the specified person at his workplace and performance of labor functions, video magnifiers, magnifying glasses;

for the visually impaired-blind: equipping the special workplace with technical orientations and devices, with the possibility of using large relief-contrast font and Braille, acoustic navigation aids, which ensure that the specified person can easily find his or her workplace and perform his or her labor functions;

For hearing-impaired persons with impaired hearing: equipment (equipment) of a special workplace with sound-amplifying equipment and loudspeaker telephones;

for hearing-impaired deaf persons: equipping the special workplace with visual indicators that convert audio signals into light, and speech signals into a text running line, for the person to easily locate his or her workplace and perform his or her work;

for disabled persons with impaired function of the locomotor apparatus: equipment that ensures the implementation of ergonomic principles (the most convenient arrangement of the elements composing the workplace for the disabled person), mechanisms and devices that allow to change the height and tilt of the work surface, the height and tilt position of the work chair seat, the tilt angle of the work chair back, equipment with a special seat that provides compensation for the effort when getting up, special devices for operating and servicing this equipment

Фонды оценочных средств для проведения промежуточной аттестации

Планируемые результаты обучения по практике для формирования компетенции. Индикаторы и критерии их оценивания

ПК.2

Способен к анализу, обоснованию и выбору решения на основе бизнес-анализа информации с использованием информационных технологий

Компетенция (индикатор)	Планируемые результаты обучения	Критерии оценивания результатов обучения
ПК.2.2 Определяет связи и зависимости между элементами информации бизнес-анализа в соответствии с выбранными подходами с применением информационных технологий в объеме, необходимом для целей системного анализа	KNOWS: -knows the methods of using information technologies to the extent necessary for the purposes of system analysis CAN: -solve theoretical and applied problems, including the ability to set a task, choose and justify a way to solve it, obtain the necessary results and conduct their economic interpretation - Know the terminology used in this subject area. HAS: -has the skills of business analysis information processing	**Неудовлетворительно** Does not know how to determine the relationships and dependencies between the elements of business analysis information; does not have the skills to process business analysis information; does not know the methods of using information technologies to the extent necessary for the purposes of system analysis **Удовлетворительно** Knows how to determine the relationships and dependencies between the elements of business analysis information; does not have the skills of business analysis information processing; does not know the methods of using information technologies to the extent necessary for the purposes of system analysis **Хорошо** Is able to determine the relationships and dependencies between the elements of business analysis information; has the skills of business analysis information processing; does not know the methods of using information technologies to the extent necessary for the purposes of system analysis **Отлично** Is able to determine the relationships and dependencies between the elements of business analysis information; has the skills of business analysis information processing; knows the methods of using information technologies to the extent necessary for the purposes of system analysis

Оценочные средства

Вид мероприятия промежуточной аттестации : Экзамен
Способ проведения мероприятия промежуточной аттестации : Защищаемое контрольное

мероприятие

Продолжительность проведения мероприятия промежуточной аттестации :
 время отводимое на доклад 2

Показатели оценивания

The practice report is mainly descriptive, there is no analysis according to the practice plan using general scientific methods and technologies, gross errors were made when interpreting the results, the conclusions and suggestions of the author are declarative, when defending the report, the student finds it difficult to answer the questions posed, makes significant mistakes.	**Неудовлетворительно**
The report on the production practice is prepared by the student and provided to the supervisor, but the student cannot answer all the questions of the supervisor regarding the essence of the practice.	**Удовлетворительно**
The report on the production practice is prepared by the student and provided to the supervisor, the student can answer all the questions of the supervisor regarding the essence of the practice, but finds it difficult to argue conclusions and generalizations.	**Хорошо**
The report on the production practice is prepared by the student and provided to the supervisor, the student easily answers all the questions of the supervisor regarding the essence of the work performed in practice, gives examples, draws analogies, gives generalizations, argues all conclusions.	**Отлично**