

ISSN 2220-685X

# ИНЖЕНЕРЛІК ГРАФИКА ЖӘНЕ КӘСІБИ БІЛІМ ПРОБЛЕМАЛАРЫ



Ғылыми-педагогикалық журнал

Scientific-pedagogical journal

Научно-педагогический журнал

PROBLEMS OF  
ENGINEERING AND  
PROFESSIONAL EDUCATION

ПРОБЛЕМЫ ИНЖЕНЕРНОЙ ГРАФИКИ  
И ПРОФЕССИОНАЛЬНОГО  
ОБРАЗОВАНИЯ

Том • Volume

2

(41) 2017

#### Редакция алқасы

В.Е. Михайленко (Украина), А. Хасанов (Түркия), В.И. Якунин (Ресей), Р. Авазов (Америка Құрама Штаттары), Ж.М. Есмұхан (Қазақстан), В.А. Плоский (Украина), Б.Н. Нурмаханов (Қазақстан), Д.Ф. Кучкарова (Өзбекстан), В.И. Римшин (Ресей), Ж.Ж. Жанабаев (Қазақстан), А. Рей (Біріккен Араб Әмірліктері), Д.А. Тусупов (Қазақстан), Т.К. Мусалимов (Қазақстан), Н.Б. Қалабаев (Қазақстан), А.Р. Хазбулатов (Қазақстан), А.Ж. Жүсіпбеков (Қазақстан), С.К. Баймұханов (Қазақстан), Т.К. Самұратова (Қазақстан), С.Б. Енкебаев (Қазақстан), Ж.А. Шахмов (Қазақстан), Р.Е. Лукпанов (Қазақстан).

#### Бас редактор

Әуез Кеңесбекұлы Бәйдібеков

#### Editorial board

V.E. Mihailenko (Ukraine), A. Hasanov (Turkey), V.I. Yakunin (Russia), R. Avazov (United States of America), J.M. Esmukhan (Kazakhstan), V.A. Ploskiy (Ukraine), B.N. Nurmahanov (Kazakhstan), D.F. Kuchkarova (Uzbekistan), V.I. Rimshin (Russia), Zh.Zh. Zhanabayev (Kazakhstan), A. Rghei (United Arab Emirates), D.A. Tusupov (Kazakhstan), T.K. Mussalimov (Kazakhstan), N.B. Kalabaev (Kazakhstan), A.R. Khazbulatov (Kazakhstan), A.Zh. Zhussupbekov (Kazakhstan), S.K. Baimukhanov (Kazakhstan), T.K.. Samuratova (Kazakhstan), S.B. Yenkebayev (Kazakhstan), Zh.A. Shakhmov (Kazakhstan), R.E. Lukpanov (Kazakhstan).

#### Chief Editor

Auuez Baidabekov

#### Редакционная коллегия

В.Е. Михайленко (Украина), А. Хасанов (Турция), В.И. Якунин (Россия), Р. Авазов (Соединённые Штаты Америки), Ж.М. Есмұхан (Қазақстан), В.А. Плоский (Украина), Б.Н. Нурмаханов (Қазақстан), Д.Ф. Кучкарова (Узбекистан), В.И. Римшин (Россия), Ж.Ж. Джанабаев (Қазақстан), А. Рей (Объединённые Арабские Эмираты), Д.А. Тусупов (Қазақстан), Т.К. Мусалимов (Қазақстан), Н.Б. Қалабаев (Қазақстан), А.Р. Хазбулатов (Қазақстан), А.Ж. Жусупбеков (Қазақстан), С.К. Баймұханов (Қазақстан), Т.К. Самұратова (Қазақстан), С.Б. Енкебаев (Қазақстан), Ж.А. Шахмов (Қазақстан), Р.Е. Лукпанов (Қазақстан).

#### Главный редактор

Байдабеков Ауез Кеңесбекович

web сайт: <http://www.enu.kz/ru/>; <http://apgrk.kz>  
e-mail: [journal.enu@gmail.com](mailto:journal.enu@gmail.com)

UDK 378.018.43

## Webinars as the Tutorial at the present stage of Education Development

Kassenova Aygul Bulterikovna<sup>1</sup>, A.V. Ogorodnikova<sup>2</sup>

<sup>1</sup>Senior Lecturer of L.N.Gumilyov Eurasian National University

<sup>2</sup>Lecturer of Kostanai State Pedagogical Institute

---

**Аңдатпа.** Мақала білім беру саласында интернет технологияларды қолдану мәселелеріне арналған. Әсіресе, бұл қашықтықтан оқыту процесіне қатысты. Қашықтықтан оқыту жоғарғы білім беру орындарында оқытуда нақты жүйеге табиғи түрде енуде (ішкі, сырттай, қашықтықтан), және оқытудың мобильдік ақпараттық ортасын құру есебінде жетіліп, дамып, Қазақстандағы мен шетелдегі білім беру құрылымдарының жүйелерін кеңейтуде.

**Кілт сөздер:** *интернет-технологиялар, білім беру, қашықтықтан оқыту, жүйе, вебинар, виртуалды кеңістік, тәсілдеме, оқыту.*

**Аннотация.** Статья посвящена вопросу использования интернет-технологий в сфере образования. Особенно это касается процесса дистанционного обучения. Дистанционное обучение естественно интегрируется в реальную систему обучения высшего учебного заведения (внутреннего, заочного, дистанционного), совершенствуя и развивая его за счет создания мобильной информационной среды обучения, расширения сети образовательных структур в Казахстане и за рубежом.

**Ключевые слова:** *интернет-технологии, образование, дистанционное обучение, сеть, вебинар, виртуальное пространство, подход, обучение.*

**Abstract.** The article is devoted to the issue of using Internet technologies in the sphere of education. Especially it concerns distance learning process. Distance learning is naturally integrated into real system of training of a higher educational institution (internal, correspondence, remote), improving and developing it due to creation of the mobile information environment of training, expansion of network of educational structures in Kazakhstan and abroad.

**Key Words:** *Internet technologies, education, distance learning, network, webinar, virtual space, approach, training.*

---

Nowadays the development of Internet technologies affects all spheres of human activities. Knowledge sharing methods are not the exception. Gradually the organization of conferences, seminars, presentations and other educational actions passes into virtual space. We live in the modern world where the phrase "Time is money" is actual.

Everybody tries to be in time, not to be late anywhere. And todaylife's realities demand knowledge of foreign languages to become successful at work.

In the modern world the development of information technologies is one of the most important engines of progress. Training in the Internet, which is network training, with use of web technologies has received great popularity. Development and constant improvement of network training expands possibilities of modern system of distance education which already has long-term experience. Distance learning is naturally integrated into real system of training of a higher educational institution (internal, correspondence, remote), improving and developing it due to creation of the mobile information environment of training, expansion of network of educational structures in Kazakhstan and abroad [1].

The formation of students' skills and abilities of independent cognitive activity with use of modern and perspective means of information technologies has become the important factor in the modern education development.

Such an approach provides essentially new level of qualitative education availability and equal educational opportunities.

The integrated system of distance education for professional education improvement includes:

- ✓ creation of a knowledge control system;
- ✓ organization of the educational portal;
- ✓ qualified teaching staff;
- ✓ students' training, assessment and testing [2].

Carrying out video and television lectures, round tables, computer videoconferences, online consultations with the teacher do students with teachers' interaction even more intensive, than at traditional form of education.

Intensive telecommunication interactions and communication among students and teachers allowsholding online seminars, business games, etc. One of effective and popular tools of distance education system are webinars, i.e. interactive seminars held through the Internet, allowing to involve specialists of the highest level in teaching activities and consultation. That makes getting high-quality knowledge for students, young scientists and all interested specialists more available.

Majority of people doesn't understand the value of new communication means – a webinar. It is often connected with online communication. The word "webinar" is abbreviation which means the seminar organized on the basis of internet technologies

which takes place in the virtual space in real time with a possibility of interactive cooperation of the trainer and the trained audience. So- a “webinar” is the action organized on the Internet for knowledge transfer to geographically remote users in real time by means of the software [3].

Webinars can be used for:

- ✓ holding virtual lectures with a possibility of all participants of distance learning interaction;

- ✓ holding short-term seminars;

- ✓ holding polls;

- ✓ performances with reports;

- ✓ holding trainings;

- ✓ group work organization [4].

Means when carrying out distance learning using webinar:

Audio. During a webinar the main communication between the teacher and listeners is carried out by means of an audio communication in real time. Also listeners and the teacher can place audio recordings, having provided the access to other participants of training.

Video. During training some videos can be shown. Also there is an opportunity to show video in real time, using the webcam or the digital camera. Video can be broadcasted, as from the teacher to listeners, and in the opposite direction.

Presentations. When holding a webinar the teacher can show presentation slides, controlling them in real time.

Demonstration of documents. When holding a webinar the teacher can show various documents, paying special attention to some areas.

File exchange. During training the teacher and students can exchange or provide access to their files.

White board. A virtual analogy of an educational board in audience. It is possible to draw, erase, etc. All participants of training use a board.

Demonstration of a desktop. During the webinar it is possible to show the desktop Windows to all participants, showing your actions.

Chat. By means of a chat the participants can exchange instant messages in the real time. Messages can be available to all listeners, or can be available only to certain people. Limits of message visibility are defined by the teacher or listeners of a webinar.

Votes and polls. Polls allow collecting information from listeners on this or that question in real time.

Remote desktop. Many software products which are used during a webinar give to participants an opportunity to manipulate objects on the computer of other users. It can be useful when it is necessary to show something to the listener of a webinar.

Mobile devices support. Many of software products and the services intended for holding webinars support the majority of mobile devices (smartphones, tablets, e-books, phones, the PDA and netbooks) existing today [5].

Typical features of a web conference:

- Slideshow presentations - images are presented to the audience and mark up tools and a remote mouse pointer are used to engage the audience while the presenter discusses slide content.
- Live or streaming video - where full motion webcam, digital video camera or multi-media files are pushed to the audience.
- VoIP - Real time audio communication through the computer via use of headphones and speakers.
- Web tours – where URLs, data from forms, cookies, scripts and session data can be pushed to other participants enabling them to be pushed through web-based logons, clicks, etc. This type of feature works well when demonstrating websites where users themselves can also participate.
- Meeting Recording - where presentation activity is recorded on the client side or server side for later viewing and/or distribution.
- Whiteboard with annotation (allowing the presenter and/or attendees to highlight or mark items on the slide presentation. Or, simply make notes on a blank whiteboard).
- Text chats - For live question and answer sessions, limited to the people connected to the meeting. Text chat may be public (echoed to all participants) or private (between 2 participants).
- Polls and surveys (allows the presenter to conduct questions with multiple choice answers directed to the audience).
- Screen sharing/desktop sharing/application sharing (where participants can view anything the presenter currently has shown on their screen. Some screen sharing applications allow for remote desktop control, allowing participants to manipulate the presenter's screen, although this is not widely used) [6].

*Fear of the first webinar.*

The first thing one should do is to make a decision to hold a webinar.

The leader of a webinar should remember that benefits which he can receive, organizing online seminars, will be paid off. The most important – is to realize groundlessness, the irrational nature of such fear, there is nothing difficult in holding a webinar actually.

It will be useful to hold the trial closed webinar at which fragments from your future performance will be heard only by the colleagues invited by you. You will be able to examine settings, learn to send files you will get used to online audience, you will begin to feel here surely.

One of the biggest difficulties for the beginning leader of webinars – impossibility to see audience, lack of instant feedback. If it represents for you a vital issue, can invite somebody who would listen to you alive and to give a lecture as if for him.

Everything can cause fears and possible technical slips. Someone is afraid that the presentation won't begin to be broadcast as it was conceived, the sound will be gone or the chat won't work. First of all – to take for granted that similar is really possible, and not only at a webinar, but also at a traditional lecture.

But while visit of a live lecture is accompanied for listeners by radical reorganization of plans at least for the whole day, participation in a webinar doesn't demand similar efforts, so and it will be much easier to restore trust of audience to you. And an opportunity in advance to test all technical details considerably reduces probability of such misunderstanding can be much more difficult, beginning from bad mood of one of participants who decided to exhaust and finishing with the choice of an unsuccessful subject or date.

The best council in that case – to remain quiet, not to lose sense of humour and not to stuff itself the head with thoughts of what has been made not so. It is better to concentrate on smoothing an unpleasant situation and to direct discussion to the necessary course so far. And only then, looking through record of the performance, try to estimate objectively as far as the performance was clear for audience how accurate was the presentation, and the speech – competent.

It is known that a negative result – is a result as well. There is an extra reason for further development [7].

There are some simple steps one can take to make a webinar easier to understand without changing too much of presentation:

1. Convey Information in Sequences: This may seem obvious, but some webinars tend to have their information jumbled around and distributed without a plan. This can cause serious confusion amongst your audience, making it difficult to follow and understand what you're trying to teach. This commonly happens when you have a lot of information and only a set amount of time to relay it. The best way to get all your information in a set sequence is to categorize each topic and include all related or similar details in each section. If this is done, you'll be able to find the best sequence for your tutorial, making it easier to create a linear presentation that's simple to understand and follow.

2. Always Use Visual Aids: When giving a presentation, researchers say that whether you're speaking to a gifted audience or not, about 65% of audience members are sure to be visual learners. When it comes to tutorial webinars, you're at a serious advantage for visuals of all kinds. Videos, infographics, memes, charts, and regular pictures can all be accessed quickly or imbedded directly into your presentation. Visual aids help to get your point across without the need for chunks of text or lengthy explanations. They're incredibly helpful and fun too-giving your webinar some flair that will keep the audience engaged and interested.

3. Add in Frequently Asked Questions: Even though webinars make it easy for your audience to ask questions directly, they may not always speak up. Prompt them with some frequently asked questions at the end of each section so that you and your participants can have a mini review after each essential step. This will help straighten out any confusing steps or directions and allow your audience to catch up if they've fallen behind. In addition to frequently asked questions, allow a miscellaneous question that the audience can fill in on their own. This will offer you tips and questions for your next webinar so you can keep improving as you go along.

4. Use Keywords: For your tutorial webinar, you'll want to use a few keywords to keep things on track and bring your audience back to a point of focus. You can create your buzzwords depending upon your webinar's topic. This will also help with searches and advertisement of your webinar, allowing your audience to find it quickly before, during, and after it has aired. Use these during the webinar too as talking points to re-enter the presentation in the event of a tangent, introduce the next section, or even to help your webinar trend on social media through a keyword hashtag. As you create more tutorial webinars, you can create new buzzwords to go with them. People tend to respond more to a common unifier, so put these keywords to good use!



5. Simplify Your Language: When creating a presentation, it can be easy to use lofty, clever language. While it is plausible that a good percentage of your audience will have no problem following along with a tutorial webinar, there will still be a sizeable amount of the audience that will get lost. As a rule, keep the language you use in a tutorial webinar at an eighth or ninth grade reading level so it is easy to understand and follow. Depending upon what your tutorial is, clear language is imperative. For example, if a potentially dangerous tutorial (such as “how to check for asbestos” or “how to install new lights in your home”) is difficult to understand, your audience can possibly harm themselves. With simple sentences your points can still be made, but in words everyone can understand.

6. Be Personable: Have you ever had a dull teacher? Did you listen when they gave long lectures? Probably not, which most likely meant you missed some important information every now and again. Even if your audience has paid to watch your tutorial webinar, it does not guarantee their attention will be held if your presentation style is lacking some interest and personality.

One of the best parts of webinars is that you get to connect with your audience the same way you would if they were in the same room with you, which means you can speak with your audience in conversational tones and allow your personality to come forward. Be yourself and engage with your audience-establish a connection that allows them to bond with you. This will make them more likely to listen to and fully absorb your message, making your tutorial webinar highly effective.

It would be desirable to add to everything above told that the learning of foreign languages by means of webinars (virtual seminars) is profitable for many reasons. First, you save time, without spending it for trips on rates. Secondly, webinars are the cheapest option of a learning of foreign language with participation of the teacher.

Thirdly, you can plunge into the foreign language learned by you, thanks to webinars. For this purpose before a webinar it is important to be prepared for a subject of "lesson" from additional literature. Such decision will introduce more efficiency in training process. Fourthly, you can ask questions by means of texting, sound or video of chats (if the hardware of your computer allows).

Fifthly, it isn't necessary to establish any software on the computer for participation in a webinar. Sixthly, you can always use the obtained data, for repeating a lesson as well as in case of traditional, resident instruction. And the last, – virtual teachers, as well as

their classical colleagues give tasks and tests thanks to which students can fix the passable material [8].

## References

- [1] Назарова Н.Б. «Использование Smart-технологий при изучении иностранных языков» // Сборник материалов Седьмого Международного научного конгресса «Роль бизнеса в трансформации российского общества – 2012». – М.: Экон-информ, 2012. – С. 310-313.
- [2] Cynthia White, Language Learning in Distance Education (Cambridge Language Teaching Library). – Cambridge: Cambridge University Press, 2003. – 280 p.
- [3] Вебинары. Новые технологии обучения // URL: <http://www.web-obuchenie.ru/webinar/vebinar-eto-prosto/> (дата обращения 10.03.2017).
- [4] Вебинары. Новые технологии обучения. Образовательные инновации от Skype // URL: <http://www.web-obuchenie.ru/category/news/> (дата обращения 10.03.2017).
- [5] ООО «Пруффми». Создание вебинаров // URL: <http://seemedia.pro/blog/1217> (дата обращения 10.03.2017).
- [6] The main features within the web event services market // World Web Event Services Markets - N100-64. – US: Frost and Sullivan, 2006. – P. 10.
- [7] Web-Portal.su - Компьютеры, создание и раскрутка сайтов от А до Я. Вебинары и конференции // URL: <http://web-portal.su/vebinar/> (дата обращения 10.03.2017).
- [8] Полезные статьи. Организация вебинаров // URL: <http://webinar.tw/poleznie-stati/organizatsiya-vebinarov.html> (дата обращения 10.03.2017).
- [9] Вебинары каждый день. Часто задаваемые вопросы по теме "коучинг" // URL: [http://webinary.com.ua/publ/stati\\_dlja\\_kazhdogo/chasto\\_zadavaemye\\_voprosy\\_po teme\\_quot\\_kouching\\_quot/6-1-0-961.15.09.2013](http://webinary.com.ua/publ/stati_dlja_kazhdogo/chasto_zadavaemye_voprosy_po teme_quot_kouching_quot/6-1-0-961.15.09.2013). (дата обращения 10.03.2017).

### **Автор (лар) ға ұсынымдар**

- Мақала Word бағдарламасында терілген және электронды нұсқасымен, қағазға басылып өткізілуі тиіс (басқа қаладағы авторларға электронды нұсқасын өткізуге болады).
- Қарпі: мәтін үшін – Times New Roman – 11 кегль;
- Пішімі А4, беттің параметрлері: сол, оң, асты және үсті жағы – 2,5 см. Абзацтық шегіну – 0,75 см. Түзілу – ені бойынша; қатар аралық интервал – 1,5 қатар.
- Кестелер мен суреттерде нөмірлері көрсетілген толық атаулары көрсетілуі тиіс. Өлшем бірліктері СИ Халықаралық бірліктер жүйесіне сәйкес болу керек.
- Мақаланың жалпы көлемі кестелер мен суреттерді, қолданылған әдебиеттерді қосқанда 4-7 беттен кем болмауы керек.
- Бөлек қағазда автор (лар) туралы мәліметтер: аты-жөні толық, ғылыми атағы, ғылыми дәрежесі, лауазымы, жұмыс орны (мекеменің немесе ұйымның атауы), толық пошталық мекен-жайы, телефон нөмірі және e-mail.
- Журналда мақаланы жарыққа шығару мүмкіндігі туралы шешім мақалаға жазылған тәуелсіз ғалымдардың екі пікірі (рецензия) және редакция алқасының бір мүшесінің ұсынымы негізінде қабылданады. Пікір беруші мақаланың ғылыми бағытына сәйкес болу керек және жарияланатын мақаланың мазмұнына, яғни теориялық маңыздылығына, тәжірибелік құндылығына және жаңа екендігіне жауапты.
- Автор бір нөмірде 2 мақаладан артық жариялауға құқы жоқ.

### **Recommendations**

- An article (electronic version is sufficient for foreign authors) should be typed MS Word program and presented in electronic form with mandatory listing of the text.
- Font –Times New Roman -11 pt.
- Format A4, Margins: left, right - 2,5 cm; top, bottom - 2.5 cm; Paragraph - 0.75 cm. Line spacing - 1,5.
- The tables and illustrations with their numbers and names should be given in full, the unit labeling in accordance with the International System of Units SI.
- The total volume of articles, including tables, illustrations and references of at least 4-7 pages.
- Information about the author: name, academic degree and title, place of work and position, full mailing address, telephone number, e-mail should be given on a separate sheet.
- The conclusion about the possibility of the publication of articles in the journal shall be based on two independent scientists review and recommendation by a member of the editorial board. The reviewer must comply with the scientific direction of the article and is responsible for the content of the published article, i.e., of theoretical significance, practical value of the novelty article recommender.
- The author can publish no more than two articles in the same issue.

### **Рекомендации авторам**

- Статья должна быть набрана в программе Word и представлена в электронном варианте с обязательной распечаткой текста (для иногородних авторов достаточен электронный вариант).
- Шрифт: для текстов – Times New Roman – 11 кегль;
- Формат А4, поля : левое, правое – 2,5 см, верхнее, нижнее – 2,5 см. Абзацный отступ – 0,75 см. Выравнивание – по ширине; Междустрочный интервал – 1,5 строки.
- В таблицах и иллюстрациях с указанием их номеров все наименования следует давать полностью, единицы измерений обозначать в соответствии с Международной системой единиц СИ.
- Общий объем статьи, включая таблицы, иллюстрации и список литературы не менее 4–7 страниц.
- На отдельном листке следует привести сведения об авторе (-ах): Ф.И.О., ученая степень и звание, место работы и должность, полный почтовый адрес, номер телефона, e-mail.
- Заключение о возможности публикации статей в журнале выносится на основании 2 рецензии независимых ученых и рекомендации одного из членов редколлегии журнала. Рецензент должен соответствовать научному направлению статьи и несет ответственность за содержание публикуемой статьи, т.е. за теоретическую значимость, практическую ценность и новизну рекомендуемой статьи.
- Автор имеет право на публикацию в одном номере не более 2-х статей.

## Мақаланың құрылымы

- ӘОЖ (Әмбебап ондық жіктеу саны) – сол жақ жоғарғы бұрышында.
- Автор (- лар) туралы ақпарат – аты-жөні толық, ғылыми атағы, ғылыми дәрежесі, лауазымы, жұмыс орны (мекеменің немесе ұйымның атауы); елдің атауы (жақын және алыс шетелдегі авторлар үшін).
- Мақаланың атауы.
- Жарияланатын мақаланың андатпасы мемлекеттік, орыс және ағылшын тілдерінде болу керек. Андатпаның көлемі 5-6 сөйлем немесе 500 баспа белгілері (мәтін 1/3 бет).
- Кілт сөздері 10 сөзден аспау керек.
- Мақаланың мәтіндік бөлігі. Мақаланың мәтінде көрсетілуі тиіс: мәселенің тұжырымы; мәселенің зерттеулерін талдау; зерттеудің мақсаты мен міндеттері; материалды таныстыру және ғылыми зерттеулер нәтижелерін тұжырымдау; қорытындысы.
- Қолданылған әдебиет.

## Structure of the article

- UDC (Universal Decimal classification number) – placed in the upper left corner.
- Information about authors - full name, title, academic degree, position, place of work (name of institution or organization); name of the country (for foreign authors).
- Article title
- Abstract published in Kazakh, Russian and English languages. The volume of abstract is 5-6 sentences or 500 words (1/3 page of text).
- Keywords are not more than ten words.
- The text of the article should be reported: formulation of the problem, the analysis of the research problem, the goal and objectives, the presentation of material and the study received research results conclusions.
- References.

## Структура статьи

- УДК (универсальный десятичный классификационный индекс) – в левом верхнем углу.
- Сведения об авторе (авторах) – ФИО полностью, ученое звание, ученая степень, должность, место работы (наименование учреждения или организации); наименование страны (для авторов ближнего и дальнего зарубежья).
- Название статьи.
- Аннотация публикуемой статьи на государственном, русском и английском языках. Объем аннотации 5-6 предложения или 500 печатных знаков (1/3 страница текста).
- Ключевые слова не более 10 слов.
- Текстовая часть статьи. В тексте статьи должны отражаться: постановка задачи; анализ исследований проблемы; цель и задачи исследований; изложение материала и обоснования полученных результатов исследований; выводы.
- Использованная литература.

## Инженерлік графика және кәсіби білім проблемалары

Problems of engineering and  
professional education

Проблемы инженерной графики и  
профессионального образования

### № 2 (41)

#### Мазмұны Contents Содержание

Ә.К. Бәйдібеков	Профессор Жақсылық Жаңабаевтың ғылымға қосқан үлесі .....	3
М.Ж. Сағындық Ф.З. Зейнолланова	Су ресурстарының мониторингі кезінде бақылаудың қашықтықтық әдісінің қолданылуы .....	9
А.М. Сонин А.Е. Сексенбаева	Оптимизация сечений колонн монолитных каркасных зданий повышенной этажности .....	19
A.B. Kassenova A.V. Ogorodnikova	Webinars as the Tutorial at the present stage of Education Development .....	25
Қ.А. Утельбай	Технико-экономическое сравнение вариантов конструктивных схем монолитных каркасных зданий .....	33
К.А. Бурманова	Имараттардың іргетастарын сейсмикалық оқшаулау әдістері .....	39
А.А. Сагинов	Состояние водопользования на автомойках в некоторых городах Казахстана .....	47
А. Әріп	Өндірістік қалдықтарды өңдеу арқылы құрылыс материалын алудың маңыздылығы .....	53
Д.А. Кучеренко	Плановое уравнивание теодолитного хода с применением ПО AutoCAD Civil 3D и CREDO DAT .....	57

ISSN 2220 - 685X



За содержание статьи ответственность несет автор

Отпечатано в типографии ЕНУ им. Л.Н. Гумилева

**Выпускающий редактор**  
к.т.н., профессор У. Кусебаев

**Технический редактор**  
Г. Тулеуова

Издательство ЕНУ  
Научно-педагогический журнал  
«Проблемы инженерной графики и профессионального образования»  
№ 2 (41). 2017. - 67 с.  
Тираж - 300 экз. Заказ – 2

**Дизайн**  
А. Токсанова

Адрес редакции:

010000, Республика Казахстан,  
г. Астана, ул. Казымукан, 13,  
ЕНУ им. Л.Н. Гумилева, корпус УЛК №1, 505-кабинет.  
Тел.: 8 (7172) 70-95-00 (вн. 33 506)

**web сайт:** <http://apgrk.kz>, <http://enu.kz>  
**e-mail:** [journal.enu@gmail.com](mailto:journal.enu@gmail.com)

ISSN 2220 – 685X

