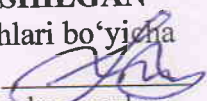


**O'ZBEKISTON RESPUBLIKASI
OLIV TA'LIM, FAN VA INNOVATSIYALAR VAZIRLIGI**

**MIRZO ULUG'BEK NOMIDAGI
SAMARQAND DAVLAT ARHITEKTURA-QURILISH UNIVERSITETI**

“KELISHILGAN”
o'quv ishlari bo'yicha
prorektor 
M.T. Shodmonqulov
Ro'yxatga olindi: № 192/a
«30» avgust 2024 yil



**MUHANDISLIK STATISTIKA
FAN DASTURI**

Kunduzgi bo'lim uchun

Bilim sohasi :	700 000	- Muhandislik, ishlov berish va qurilish sohalari
Ta'lim sohasi:	710 000	- Muhandislik ishi
Ta'lim yo'nalishi:	60713500	- Mexanika muhandisligi

Kurs ma'lumotlari
Course Information Form

Modul kodi Code MAS2120	O'quv yili 2024-2025	Semestr 4	ECTS – Kreditlar 4-semestr -4			
Modul turi Majburiy	Ta'lim tili O'zbek/rus		Auditoriya soatlari			Mustaqil ta'lim (soat/hafta) Independent Education (hour/week)
Fan nomi Title	Jami yuklama	Ma'ruza (soat/hafta) Lecture (hour/week)	Amaliy (soat/hafta) Practical (hour/week)	Laboratoriya (soat/hafta) Laboratory (hour/week)		
Muhandislik statistika	4-semestr -120	4-semestr -2			4-semestr -6	

Dastlabki shart Prerequisite	Yo'q None
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Semestr Semestr	Bahorgi Spring
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Kurs tili Course language	O'zbek, Rus Uzbek, Russian
O'quv kursi Level of Course	Ikkinci kurs Second Cycle
Ta'lim yo'nalishlari Course type	60713500- Mexanika muhandisligi
Kurs toifasi Course Category	Asosiy Core Courses
Dars shakli Mode of Delivery	An'anaviy (Yuzma – yuz muloqot) Face – to – face

Mas'ul kafedra Owner academic unit	Iqtisodiyot Economy
Kursga mas'ul Cours Coordinator	Rayimov Ma'rufjon Abdurashid o'g'li
O'qituvchilar Instructor(s)	Rayimov M.A.
Yordamchilar Asistant(s)	

Fanni o'qitishdan maqsad Course objectives	Ushbu kursning maqsadi bakalavriat bosqichida statistikaning asosiy tushunchalari va usullarini o'rgatishdir. The aim of this course is to teach the main concepts and methods of statistics at the undergraduate level.
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Fanning mazmuni Course content	Ushbu kursning mazmuni ma'lumotlarni umumlashtirish, grafik tahlil, ehtimollar nazariyasi, tasodifiy o'zgaruvchilar va ularning ehtimollik taqsimotlari, tanlab olish va tanlash taqsimotlari va tasodifiy o'zgaruvchilar momentlari. The content of this course is summarizing numerical data, graphical analysis, probability theory, random variables and their probability distributions, sampling and sampling distribution and moments of random variables.
Tavsiya qilingan yoki talab qilinadigan adabiyotlar ro'yxati Recommended Or Required Reading	<ol style="list-style-type: none"> 1. Paul Newbold. Statistics for Business and Economics. Prentice Hall. 2008. 2. Micheal Panik. Advanced Statistics from an Elementary Point of View. Academic Press. 2005. Lecture Notes. 3. James McClave, Terry Sincich Statistics. Textbook. USA. 2017 p. 4. Daris Singpurwalla A Handbook of statistics: an Overview of Statistical Methods 1 st edition. 2017 year. 5. Аюбжонов А.Х., Соатов Н.М., Набиев Х. Статистика. Дарслик – Т.: 2019, 814 бет 6. Аюбжонов А.Х., Соатов Н.М., Набиев Х. Статистика. Дарслик – Т.: 2019, 433 бет 7. Soatov N.M., Nabiyev X., Nabiyev D.X., Tillxo'jaeva G.N. Statistika. Darslik. – T.: TDIU, 2011. – 546 bet. 8. Абдуллаев Ё. Статистика назарияси. дарслик. – Т.: Ўқитувчи, 2002. – 647 б. 9. Soatov N.M., Tillaxo'jayeva G.N. Statistika nazariyasi. Darslik. – T.: TDIU, 2005. – 248 bet.
Tavsiya etilgan qo'shimcha dastur komponentlari Recommended Optional Program Components	Yo'q\ (bor bo'lsa yoziladi) None

Kursni o'rganish natijalari

Course learning outcomes

1	Ushbu kursni muvaffaqiyatli tamomlagan talabalar turli grafiklar orqali boshqa ijtimoiy fanlarda, shuningdek, iqtisodda uchraydigan ma'lumotlar turlarini tahlil qilish va sharhlash va ularning natijalarini hisobotda taqdim etish; After successfully completing this course, students will be able to analyze and interpret the types of data used in economics and other social sciences by the means of various charts/graphs and report his/her findings formally;
2	Ehtimollar nazariyasi asosida iqtisodiy hodisalardagi noaniqlik omilini miqdoriy baholay oladi; After successfully completing this course, students will be capable of quantifying the element of uncertainty in economic phenomena from the point of the probability theory;
3	Tasodifiy o'zgaruvchilar va ularning taqsimlanishi haqidagi asosiy statistik tushunchalar va jarayonlar haqida funktsional bilimlarga ega bo'ladi; After successfully completing this course, students will have the functional knowledge of basic statistical concepts and processes such as random variables and their distributions;

4	<p>Ushbu kursni muvaffaqiyatli tamomlagan talabalar boshqa ijtimoiy fanlarda, shuningdek, iqtisodda uchraydigan ma'lumotlar turlarini raqamli umumlashtiruvchi o'lchovlar orqali tahlil qilish va sharhlash va ularning natijalarini hisobotda taqdim etish;</p> <p>After successfully completing this course, students will be able to analyze and interpret the types of data used in economics and other social sciences by the means of numerical summary measures and report his/her findings formally;</p>
5	<p>Asosiy statistik tushunchalar va jarayonlar, masalan, markaziy chegara teoremasi, tanlab olish va tanlash taqsimoti haqida funktsional bilimlarga ega bo'ladi;</p> <p>After successfully completing this course, students will have the functional knowledge of basic statistical concepts and processes such as sampling and sampling distribution and central limit theorem.</p>

Haftalik mavzular va tegishli tayyorgarlik ishlari

Weekly Subjects and Related Preparation Studies

Hafta Week	Mavzular Themes	Resurslar Related preparation
1.	Muhandislikda ehtimollik va statistika Probability and statistics in Engineering	1-darslik (I bob)
2.	Tasodifiy tajribalar, namuna maydoni va hodisalar. Random experiments, sample space and events.	1-darslik (I bob)
3.	Ehtimollarni hisoblash va teoremlar Probability computation and theorems.	1-darslik (I bob)
4.	Shartli ehtimollik, mustaqil hodisalar ehtimoli va Bayes teoremasi. Conditional probability, probability of independent events, and Bayes' Theorem.	1-darslik (I bob)
5.	Diskret tasodifiy miqdorlar, ehtimollik funksiyasi va taqsimoti Funktsiyasi Discrete random variables, probability function and distribution function	1-darslik (II bob)
6.	Diskret tasodifiy o'zgaruvchilarni kutish, dispersiya va standart og'ish. Diskret tasodifiy o'zgaruvchilarni kutish, dispersiya va standart og'ish.	1-darslik (II bob)
7.	Discrete distributions: Uniform distribution and Binomial distribution Diskret taqsimotlar: yagona taqsimot va binom taqsimoti	1-darslik (II bob)
8.	Oraliq nazorat 1 Diskret taqsimotlar: yagona taqsimot va binom taqsimoti	1-darslik
9.	Uzluksiz tasodifiy miqdorlar va ularning zichlik funktsiyalari va tarqatish funktsiyalari	2-darslik (I bob)

	Continuous random variables and their density functions and distribution functions	
10.	Uzluksiz taqsimotlar: yagona taqsimot va normal Tarqatish Continuous distributions: Uniform distribution and normal distribution	2-darslik (I bob)
11.	Birgalikda taqsimlanish, kovariatsiya va korrelyatsiya Joint distributions, covariance and correlation.	2-darslik (II bob)
12.	Point and interval estimation Nuqta va intervalni baholash	2-darslik (II bob)
13.	Statistikaga kirish va regressiya tahlili Introduction to statistics and regression analysis	2-darslik (II bob)
14.	Gipotezani tekshirish Hypothesis testing	2-darslik
15.	Gipotezani tekshirish Hypothesis testing	

Baholash jarayoni Evaluation System		
Mashg'ulot turi Activities	Soni Number	Baholash Percentage of Grade
Darsga qatnashish Attendance / participation	15	20
Laboratoriya ishi Laboratory		
Amaliy ish (qo'shimcha vazifa) Application		
Kurs ishi Field work		
Maxsus kurs amalyoti (ish joyida) Special course internship (work placement)		
Testlar Quizzes / studio critics		
Uyga vazifani baholash Homework assignments		

Ijodiy ish (taqdimot) Presentations / jury		
Loyiha ishi Project		
Seminar Seminar / workshop		
Oraliq nazorat Mid -Terms	2	30
Yakuniy nazorat Final	1	50
O'zlashtirish ko'rsatgichi Percentage of in – term studies		50
Yakuniy imtihon bahosi Percentage of final examination		50
Jami Total		100

ECTS taqsimoti ECTS workload table			
Topshiriqlar Activities	Soni Number	Davomiyligi (soat) Duration (hour)	Umumiy yuklama Total workload
Mashg'ulot soati Course hours	15	2	30
Laboratoriya ishi Laboratory			
Amaliy ish (qo'shimcha vazifa) application			
Kurs ishi Field work			
Mustaqil ta'lim Study hours out of class	15	6	90

Maxsus kurs amaliyoti (ish joyida) Special course internship (work placement)			
Uyga vazifani baholash Homework assignments			
Testlar / Viktorina Quizzes / studio critics			
Loyiha ishi Project			
Ijodiy ish (taqdimot) Presentations / seminar			
Oraliq nazorat Mid – terms (Examination +Examination prep. Duration)			
Yakuniy nazorat (nazorat va nazoratga tayyorlanish soati) Final (examination +examination prep. Duration)			
Jami yuklama Total workload			120
Jami yuklama / 30 (soat) Total workload / 30(h)			4
Kredit ECTS credit			4

Qo'shimcha eslatmalar Extra Notes	Yo'q\ (bor bo'lsa yoziladi). None
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Fan dasturi Samarqand davlat arxitektura-qurilish universiteti Kengashning 2024 yil 30 - avgustdagi 1 -sonli yig'ilishi qarori bilan ma'qullangan.

Kafedra mudiri.:

Tuzuvchi:



M.Sh.Komilova

M.A.Rayimov