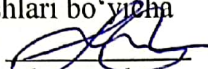


**O'ZBEKISTON RESPUBLIKASI**  
**OLIV TA'LIM, FAN VA INNOVATSIYALAR VAZIRLIGI**  
**SAMARQAND DAVLAT ARHITEKTURA – QURILISH UNIVERSITETI**

**“KELISHILGAN”**  
o'quv ishlari bo'yicha  
prorektor   
M.T. Shodmonqulov  
Ro'yxatga olindi: № 150/a  
«30» avgust 2024 yil



**TEXNIK CHIZMACHILIK VA TAVSIF GEOMETRIYASI**  
**FAN DASTURI**

**Bilim sohasi:** 700000 – Muhandislik, ishlov berish va qurilish  
**Ta'lim sohasi:** 730000 – Arxitektura va qurilish  
**Ta'lim yo'nalishi:** 60730700- Qiymat injiniringi va ko'chmas mulkni boshqarish

**Samarqand – 2024**

**Kurs ma'lumotlari**  
Course Information Form

<b>Modul kodi</b> Code KRM1050	<b>O'quv yili</b> 2024-2025	<b>Semestr</b> 2	<b>ECTS – Kreditlar</b> 2-semestr -4		
<b>Modul turi</b> Majburiy	<b>Ta'lim tili</b> O'zbek/rus		<b>Auditoriya soatlari</b>		<b>Mustaqil ta'lim</b> (soat/hafta) Independent Education (hour/week)
<b>Fan nomi</b> Title	<b>Jami yuklama</b>	<b>Ma'ruza</b> (soat/hafta) Lecture (hour/week)	<b>Amaliy</b> (soat/hafta) Practical (hour/week)	<b>Laboratoriya</b> (soat/hafta) Laboratory (hour/week)	
<b>Texnik chizma va muhandislik geometriyasi</b>	2-semestr -120	2-semestr -2	2-semestr -2		2-semestr -4

<b>Dastlabki shart</b> Prerequisite	<b>Yo'q</b> None
--	---------------------

<b>Semestr</b> Semestr	<b>Bahorgi</b> Spring
---------------------------	--------------------------

<b>Kurs tili</b> Course language	<b>O'zbek, Ingliz, Rus</b> Uzbek, English, Russian
<b>O'quv kursi</b> Level of Course	<b>Birinchi kurs</b> First Cycle
<b>Ta'lim yo'nalishlari</b> Course type	60730700-Qiyamat injiniringi va ko'chmas mulkni boshqarish
<b>Kurs toifasi</b> Course Category	Asosiy Core Courses
<b>Dars shakli</b> Mode of Delivery	An'anaviy (Yuzma – yuz muloqot) Face – to - face

<b>Ma'sul kafedra</b> Owner academic unit	Arxitektura Department of architectura
<b>Kursga ma'sul</b> Cours Coordinator	Saparov Hazratkul
<b>O'qituvchilar</b> Instructor(s)	Kulnazarov Baxram, Abdumonnonov Maxsud, Saparov Hazratkul, Suvonov Obidjon, Xujamov Ziyovuddin, Vohidov Abror, Masaridinova Nilufar, Maxmudova Saboxat.
<b>Yordamchilar</b> Asistant(s)	Masaridinova Nilufar

<b>Fanni o'qitishdan maqsad</b> Course objectives	Texnik chizma va chizma geometriyaning tavsifi, darsda qo'llaniladigan chizmachilik asboblariidan foydalanish, proyeksiya; Proyeksiya turlari. Proyeksiyalash usullari, nuqtalar proyeksiyalari, Epurni yaratish, chiziqlar; Chiziqlarning turlari, chiziqlarning berilishi va proyeksiyalari. Chizish asboblariidan foydalanish, 3D geometrik obyektning proyeksiya chizmalari, perspektiva, chiziqlar turlari va chiziq yo'g'onliklari. Nuqtalarning tekisliklardagi izlarini aniqlash. AutoCAD dasturi, Displey, Yangi fayllar, Ochiq fayllar, Fayllar birlashtirish, Turli fayllar bilan birgalikda ishlash buyruqlari,
--	---

	<p>2D chizma; Chizish buyruqlari, buyruqlarni o'zgartirish, qatlamlarni ko'rish, Muhandislik geometriyasida o'lchamlarni o'rnatish va o'lchovlarni amalga oshirish, blok va kutubxonani yaratish va ishlatish, matn va unda ishlash, chizma tuzish.</p> <p>Description of Technical Drawing and Descriptive Geometry, Explanations of Drawing Tools Used in Course, Projection; Types of Projection. Procedures of Projection, Projections of Points, Create of Epure, Lines; Description of Lines, Positions and Projections of Lines. Usage of Drawing Tools, Projection Drawings of a 3D Geometrical Object, Perspective, Types of Lines and Line Weights. Determination of the Traces on the Planar/Planar Expanded Surfaces of the Points on the Sphere. Description of AutoCAD, Display, New Files, Open Files, Union of Files, Commands of Joint Work with Different Files, 2D Drawing; Drawing Commands, Modify Commands, View Commands, Layers, Settings of Dimensioning According to Geomatic Engineering and To Make Dimensioning, Create and Use of Block and Library, Text and Hatch, Plotting.</p>
<p><b>Fanning mazmuni</b> Course content</p>	<p>Ikki o'lchovli ob'ektlarni uch o'lchovdan foydalangan holda ikki o'lchovli tekislikda loyihalash va tegishli masalalarni pozitsion va metrik muhitiga o'tkazish yo'li bilan yechish ko'nikmalariga ega bo'lish.</p> <p>To be able to design three-dimensional objects in two-dimensional plane using three dimensions and to acquire the skill of solving the related problems by technical drawing and transferring to digital environment.</p>
<p><b>Tavsiya qilingan yoki talab qilinadigan adabiyotlar ro'yxati</b> Recommended Or Required Reading</p>	<p><b>Asosiy adabiyotlar</b></p> <ol style="list-style-type: none"> <li>1.Şahinler,O.-Kızıll, F.,Technical Drawing in Architecture, İDSGA, 1975</li> <li>2.Sh.Murodov, L.Xakimov, A.Xolmurzayev, M.Jumayev, A.To'xtayev. Chizma geometriya, Iqtisod-moliya, 2006.</li> <li>3.B. Voxidov. Chizma geometriya kursi, Samarqand – 2010. y.</li> <li>4. B. Qulnazarov. Chizma geometriya, Toshkent; “O'zbekiston” – 2006. y</li> <li>5.M. Abdumomononov. Qurilish chizmachiligi, Samarqand – 2022. y.</li> <li>6.Saydaliyev S.S. Kompyuterda loyihalash. Fan va texnologiyalar. 2019 y.</li> <li>7.O.Suvonov. Kompyuterda loyihalash. Fan bulog'i. 2023 y.</li> </ol> <p><b>Qo'shimcha adabiyotlar</b></p> <ol style="list-style-type: none"> <li>1. İnşaat Mühendisliği ve Mimarlar için Teknik Resim Kitapları</li> <li>2. Ching F.D.R., Design Drawing, John Wiley &amp; Sons, 1997.</li> </ol>
<p><b>Tavsiya etilgan qo'shimcha dastur komponentlari</b> Recommended Optional Program Components</p>	<p>Yo'q\ (bor bo'lsa yoziladi)</p> <p>None</p>

## Kursni o'rganish natijalari

### Course learning outcomes

1	<p>Talaba asosiy proyeksiya qoidalari va proyeksiya tushunchalarini aniqlaydi.</p> <p>Student shall define the basic projection plones and projection concepts</p>
---	--

2	Talaba ikki o'lchamli tekislikda ko'rsatilgan jismlarning haqiqiy o'lchamlarini aniqlaydi. Student shall determine the actual dimensions of the objects shown on the two-dimensional plane.
3	Talaba chizma geometriya texnikasidan foydalangan holda geodezik proyeksiya yuzalarini aniqlaydi. Student shall define the geodetic projection surfaces using the descriptive geometry technique.
4	Muhandislik geometriyasi uchun zarur bo'lgan o'lchov birliklari, nuqta, chiziq, ko'pburchak, belgi va matn bilan bog'liq asboblarni AutoCAD dasturida ishlatishi kerak. Student shall run the tools related to the dimensioning settings, point, line, polygon, symbol, and text necessary for geometric engineering in a CAD program.
5	Talaba texnik chizma va AutoCAD dasturining asosiy tushunchalarini aniqlaydi. Student shall define basic concepts of technical drawing and CAD program.

## Haftalik mavzular va tegishli tayyorgarlik ishlari

### Weekly Subjects and Related Preparation Studies

Hafta Week	Mavzular Themes	Resurslar Related preparation
1.	Texnik chizma va chizma geometriya asoslari, Davlat standartlari, kursda foydalaniladigan chizma uskunalardan foydalanish, Proyeksiyalash usullari; Markaziy va parallel proyeksiyala.	Adabiyot 1
2.	Loyihalash tartib-qoidolari, nuqtalarning proyeksiyalari, xususiy vaziyatdagi chiziqlar; Chiziqlarning turlari, chiziqlarning vaziyatlari va proyeksiyalari.	Adabiyot 1
3.	Chizma chizish asboblardan foydalanish, 3D o'lchamli proyeksiya tekisliklaridagi chizmalari, chiziq turlari va chiziq vaziyatlari.	Adabiyot 2
4.	<b>1-uyga vazifa:</b> Nuqtalarning proyeksiya tekisliklariga nisbatan vaziyatlari.	Adabiyot 3
5.	<b>2-uyga vazifa:</b> Umumiy vaziyatdagi chiziqlarning haqiqiy uzunligini qurish.	Adabiyot 3.4
6.	<b>3-uyga vazifa:</b> Sirt ustidagi nuqtani kesuvchi tekislik usuli yordamida aniqlash.	Adabiyot 5.6
7.	<b>4-uyga vazifa:</b> Sirt ustidagi nuqtani kesuvchi tekislik usuli yordamida aniqlash.	Adabiyot 7.8
8.	<b>5-uyga vazifa:</b> Sirt tekislik bilan kesishuvi	Adabiyot 9
9.	AutoCAD dasturi, displey, asboblari paneli, yorliqlar, ma'lumotlarni kiritish, yangi fayl yaratish, ochish, saqlash va chiqish buyruqlari. Bog'lash buyruqlari.	Adabiyot 10
10.	Chizish buyruqlari, chizish buyruqlari va ularning qo'llanilishi; Chiziqli nur, ko'p chiziqli, ko'p chiziqli uslub, to'rtburchaklar, tekis chiziq, ko'pburchak, yoy, aylana, halqa,	Adabiyot 11

	spline, ellips, nuqta, nuqta foydalanish.	
11.	Ko'rish buyruqlari; Kattalashtirish, panorama qilish, ko'rish, yashirish, soya qilish, yangilash. Taxrirlash buyruqlari; O'chirish, nusxa ko'chirish, ko'chirish, ofset qilish, kesish, aylantirish, masshtablash, oyna, massiv, matn buyruqlari. Hatch buyruqlari.	Adabiyot 9
12.	Buyruqlarni o'zgartirish; Portlash, cho'zish, qisqartirish, kengaytirish, yumaloqlash, Faska qilish, o'zgartirish, xususiyatlar, bekor qilish, takrorlash, qatlamlar.	Adabiyot 9,10
13.	O'lchamlari; Muhandislik chizmalarida o'lchov uslublari, o'lchamini o'zgartirish, o'lchov qoidalari. Chop qilish qoidalari.	Adabiyot 9
14.	AutoCAD dasturi, displey, asboblari paneli, yorliqlar, ma'lumotlarni kiritish, yangi fayl yaratish, ochish, saqlash va chiqish buyruqlari. Bog'lash buyruqlari.	Adabiyot 8
15.	Yangi fayl yaratish, ochish, saqlash va chiqish buyruqlari. Bog'lash buyruqlari.	Adabiyot 10

## Baholash jarayoni

Evaluation System

Mashg'ulot turi Activities	Soni Number	Baholash Percentage of Grade
Darsga qatnashish Attendance / participation	15	30
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	4	60
Laboratoriya ishi Laboratory			
Amaliy ish (qo'shimcha vazifa) application			
Kurs ishi Field work			
Mustaqil ta'lim (maslahat) Study hours out of class	1	60	60
Maxsus kurs amalyoti (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)			
		<b>Jami yuklama Total workload</b>	120
		<b>Jami yuklama / 30 (soat) Total workload / 30(h)</b>	120/30=4
		<b>Kredit ECTS credit</b>	4

Qo'shimcha eslatmalar Extra Notes	Yo'q\ (bor bolsa yoziladi) None
--------------------------------------	------------------------------------

Fan dasturi Mirozo Ulug'bek nomidagi Samarqand davlat Arxitektura-qurilish universiteti kengashning 2024 yil 30-avgustdagi 01-sonli bayonnomasi bilan ma'qullangan.

Kafedra mudiri:



L. A. Raximov

Tuzuvchilar:



M. Abdumnonov



N.A. Masaridinova