O‘ZBEKISTON RESPUBLIKASI
OLIY TA’LIM, FAN VA INNOVATSIYALAR VAZIRLIGI

SAMARQAND DAVLAT ARXITEKTURA – QURILISH UNIVERSITETI

“KELISHILGAN”
o‘quv ishlari bo‘yicha
prorektor _____
M.T.Shodmonqulov
Ro‘yxatga olindi: № 09/A.
«29» avgust 2025 yil

“TASDIQLAYMAN”
Rektor _____
Ch.J. Turkyilmaz
«29» avgust 2025 yil

STATIKA
FAN DASTURI

Bilim sohasi:	700 000 - Muhandislik, ishlov berish va qurilish sohalari
Ta’lim sohasi:	730 000 - Arxitektura va qurilish
Ta’lim yo‘nalishi:	60730300 – Qurilish muhandisligi

Samarqand – 2025

Modul kodi Code KRM 1040	O‘quv yili 2025-2026	Semestr 2	ECTS – Kreditlar 5			
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)	
Statika	150		4	-	-	6

Dastlabki shart Prerequisite	**INS1327 Matematika**

Semestr Semestr	**Bahorgi** Spring

Kurs tili Course language	**O‘zbek, Ingliz, Rus** Uzbek, English, Russian
O’quv kursi Level of Course	**Birinchi kurs** First Cycle
Ta’lim yo’nalishlari Course type	60730300 – Qurilish muhandisligi
Kurs toifasi Course Category	Asosiy Core Courses
Dars shakli Mode of Delivery	An’anaviy (Yuzma – yuz muloqot) Face – to - face

Ma’sul kafedra Owner academic unit	Qurilish muhandisligi Department of Civil Engineering
Kursga ma’sul Cours Coordinator	Xodjabekov M.U.
O‘qituvchilar Instructor(s)	Turayev I.H., A.Otaqulov, N.U.Shodmonqulova
Yordamchilar Asistant(s)	

Yo’nalish maqsadlari Couse Objektues	Moddiy nuqtalar, qattiq jismlar va strukturaviy sistemalar muvozanatining asosiy tamoyillarini o'rganish va strukturaviy sistemalarda ichki kuchlarni hisoblash. To learn the basic principles of equilibrium of particles, rigid bodies and structural systems, and to compute the internal forces in structural systems.
Yo’nalish mazmuni Couse Content	Kirish va asosiy tamoyillar; Vektorlar va kuchlar; Kuchlar sistemasi; Moddiy nuqtalar va qattiq jismlarning muvozanati; Og'irlik markazi; Ichki kuchlar; Troslar; Kabellar; Inersiya momentlari; Ishqalanish; Mumkin bo’lgan ish Introduction and Fundamental Principles; Vectors and Forces; Force Systems; Equilibrium of Particles and Rigid Bodies; Center of Gravity; Internal Forces; Trusses; Cables; Moments of Inertia; Friction; Virtual Work
Kutilayotgan natijalar	Talabalar statikaning asosiy tushunchalari va tamoyillarini bilib oladilar va

Couse learning Outcomes	ulardan masalalar yechishda foydalana oladilar. Talabalar masalani yechishda statikaning asosiy tushunchalari va tamoyillaridan foydalana oladilar. Talabalar strukturaviy sistemalarning tayanch reaksiyalarini aniqlay oladilar. Talabalar ferma, balkalar va kabellar kabi konstruktiv sistemalarni tahlil qila oladilar. Talabalar statik aniq balkalar va qo'shma konstruksiyalarning ichki kuch diagrammalarini chiza oladilar. Students will be able to learn the basic concepts and principles of statics, and they will be able to use them in solving problems.Students will be able to use to the basic concepts and principles of statics in solving problem.Students will be able to determine the support reactions of structural systems.Students will be able to analyze structural systems such as trusses, beams and cables. Students will be able to sketch the internal force diagrams of statically determinate beams and frames.
O'qish uchun taklif yoki talab qilingan ro'yxat	1. K.Ismoilov, U.Mustafayev, A.T.Quldashev «Nazariy mexanika». – T.: Mashhur-press, 2017.-382 b. 2. J.Qayumov, N.U.Shodmonqulova "Statika" Darslik. Toshkent 2025. 3. И.В.Мешчерский «Назарий механикадан масалалар тўплами».– Т.: Ўқитувчи, 1967.-418 б. 4. A.A. Yablonskiy. «Nazariy mexanika fanidan kurs ishlari uchun topshiriqlar to'plami». T.: «O'qituvchi», 2002. 5. J.L.Meriam and L.G.Kraige, 'Engineering Mechanics: Statics (V.1), 7th edition, Wiley 2012. 6. R.C.Hibbeler, Engineering Mechanics: STATICS (SI Edition), Prentice Hall 2004. 7. F.P.Beer and E.R.Johnston, 'Vector Mechanics for Engineers: Statics (V.1), 3rd SI edition, TMH, 1998

Hafta	Mavzular	Tegishlilik
1	Kirish va asosiy tushunchalar; statika aksiomalari; vektorlar ustidagi amallar; kuchning o'qdagi proyeksiyasi; bog`lanish reaksiyalari. [https://www.tu.berlin/smb/studium-lehre/lv-der-grundmechanik/statik-und-elementare-festigkeitslehre]	[1] 1-bob [6] 1-bob
2	Absolyut qattiq jism, ekvivalent kuchlar sistemalari; kuchning nuqtaga nisbatan momenti; kuchning o'qqa nisbatan momenti; juft kuch, juft kuch momenti. [https://www.tu.berlin/smb/studium-lehre/lv-der-grundmechanik/statik-und-elementare-festigkeitslehre]	[1] 1-bob
3	Ekvivalent juftlar; kuchlar sistemasini bitta kuch va bitta juftga keltirish; Varin'on teoremasi; dinamik vint.	[1] 1-bob
4	Og'irlik markazi, egri chiziq, tekis shakl va jismlarning og'irlik markazlari, Pap-Gulden teoremalari. [https://www.tu.berlin/smb/studium-lehre/lv-der-grundmechanik/statik-und-elementare-festigkeitslehre]	[1] 9-bob [2] 7-bob [3] 9-bob
5	Og'irlik markazi; egri chiziq, tekis shakl va jismlarning og'irlik markazlari; Pap-Gulden teoremalari. [https://www.tu.berlin/smb/studium-lehre/lv-der-grundmechanik/statik-und-elementare-festigkeitslehre]	[1] 9-bob [2] 7-bob [3] 9-bob
6	Tekislikdagi kuchlar sistemasining muvozanati.	[1] 4-bob

	[https://www.tu.berlin/smb/studium-lehre/lv-der-grundmechanik/statik-und-elementare-festigkeitslehre]	
7	Fazodagi kuchlar sistemasini sodda holga keltirish. Fazodagi kuchlar sistemasi muvozanati	[2] 6-bob
	1-oraliq Midterm 1	
8	Murakkab mexanik sistemalar; mexanik sistemaning erkinlik darajasi; bosh vektor. [https://www.tu.berlin/smb/studium-lehre/lv-der-grundmechanik/statik-und-elementare-festigkeitslehre]	[2] 4-bob [4] 5-bob
9	Qo'shma balkalar muvozanati. [https://www.tu.berlin/smb/studium-lehre/lv-der-grundmechanik/statik-und-elementare-festigkeitslehre]	[1] 5-bob
10	Fermalar; tugunni kesish usuli; Ritter usuli.	[2] 5-bob [3] 4-bob
11	Tekis shakllarning inersiya momentlari; Parallel o'qlarga nisbatan inersiya moment teoremasi; Elementar yuzachalarning inersiya momenti; Inersiya radiusi [https://www.tu.berlin/smb/studium-lehre/lv-der-grundmechanik/statik-und-elementare-festigkeitslehre]	[2] 9-bob [5] 6-bob
12	Bosh inersiya o'qlari va momentlari; Massalar inersiya momentlari. [https://www.tu.berlin/smb/studium-lehre/lv-der-grundmechanik/statik-und-elementare-festigkeitslehre]	[2] 9-bob [5] 6-bob
13	Ishqalanish. (2-oraliq) [https://www.tu.berlin/smb/studium-lehre/lv-der-grundmechanik/statik-und-elementare-festigkeitslehre]	[2] 8-bob
14	Virtual ish.	[5] 4-bob
15	Mumkin bo'lgan ko'chishlar prinsipi	[2] 10-bob

Baholash jarayoni Evaluation System		
Mashg'ulot turi Activities	**Soni** Number	**Baholash** Percentage of Grade
Darsga qatnashish Attendance / particition		
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 crtics		
Uyga vazifani baholash Homework assignments		
Ijodiy ish (taqdimot) Presentations / jury		
Loyiha ishi Project		
Seminar Seminar / workshop		
Oraliq nazorat Mid -Terms	2	60
Yakuniy nazorat Final	1	40
O'zlashtirish ko'rsatgichi Percentage of in – term studies		**60**

Yakuniy imtihon bahosi Percentage of final examination	**40**
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	30	2	60
Laboratoriya ishi Laboratory			
Amaliy ish (qo'shimcha vazifa) application			
Kurs ishi Field work			
Mustaqil ta'lim (maslahat) Study hours out of class	5	4	20
Maxsus kurs amalyoti (ish joyida) Special course internship (work placement)			
Uyga vazifani baholash Homework assignments	5	6	30
Testlar / Viktorina Quizzes / studio critics			
Loyiha ishi Project			
Ijodiy ish (taqdimot) Presentations / seminar			
Oraliq nazorat Mid – terms (Examination +Examination prep. Duration)	2	10	20
Yakuniy nazorat (nazorat va nazoratga tayyorlanish soati) Final (examination +examination prep.Duration	1	20	20
		Jami yuklama Total workload	**150**
		Jami yuklama / 30 (soat) Total workload / 30(h)	**150/30=5**
		Kredit ECTS credit	**5**

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

Oliy ta'lim, fan va innovatsiyalar vazirligi tomonidan 2025-yil uchun tasdiqlangan xalqaro e'tirof etilgan tashkilotlarning reytingida top 300 talikka kiruvchi Technische Universitat Berlin (TU Berlin) (QS-2146) ning "Heat transfer" fan dasturi tahlil qilinib ushbu asosda fan dastur ishlab chiqildi. "Materiallarning mustahkamligi 1" fanining dasturi tayyorlanib 12 ta mavzusi yangilandi.[**https://www.tu.berlin/en/**]

Fan dasturi Samarqand davlat arxitektura qurilish unversiteti Kengashning 2025 yil 29- avgustdagi 1 -sonli yigilishi qarori bilan ma'qullangan.

"Qurilish muhandisligi" kafedrasi mudiri: G`.Karimov

Tuzuvchilar: I.H.Turayev
A.A.Otaqulov