"TASDIQLAYMAN"
Buxoro davlat universiteti rektori
__________ O.X.Xamidov
2021 yil «___» ______________
m.o'.

**O'ZBEKISTON RESPUBLIKASI OLIY VA O'RTA MAXSUS TA'LIM VAZIRLIGI**
**BUXORO DAVLAT UNIVERSITETI**

# O'QUV REJA

**Ta'lim yo'nalishi:**
**60610600 - Dasturiy injiniring**

**Akademik daraja** – BAKALAVR
**O'qish shakli** – kredit tizimi
**Ta'lim shakli** – kechki
**O'qish muddati** – 4,5 yil

## I. O'QUV JARAYONI JADVALI

| Kurs | Haftalar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | O'quv jarayoni haftalari soni: Jami | shundan: Nazariy va amaliy ta'lim | Attestatsiyalar | Kredit ta'lim tizimiga kirish | Malakaviy amaliyot | Yakuniy davlat attestatsiyasi | Ta'til haftalari soni | Hammasi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sentabr | | | | | Oktabr | | | | Noyabr | | | | | Dekabr | | | | Yanvar | | | | | Fevral | | | | Mart | | | | | Aprel | | | | May | | | | Iyun | | | | Iyul | | | | Avgust | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | | | | | | | | |
| I | K | K | | | | | | | | | | | | | | | | T | T | A | A | A | A | | | | | | | | | | | | | | | | A | A | A | A | T | T | T | T | T | T | T | T | T | T | 40 | 30 | 8 | 2 | 0 | | 12 | 52 |
| II | K | | | | | | | | | | | | | | | | A | T | T | A | A | A | T | | | | | | | | | | | | | | | | M | M | A | A | A | T | T | T | T | T | T | T | T | T | 40 | 30 | 7 | 1 | 2 | | 12 | 52 |
| III | K | | | | | | | | | | | | | | | | A | T | T | A | A | A | T | | | | | | | | | | | | | | | | M | M | A | A | A | T | T | T | T | T | T | T | T | T | 40 | 30 | 7 | 1 | 2 | | 12 | 52 |
| IV | K | | | | | | | | | | | | | | | | A | T | T | A | A | A | T | | | | | | | | | | | | | | | | M | M | A | A | A | T | T | T | T | T | T | T | T | T | 40 | 30 | 7 | 1 | 2 | 0 | 12 | 52 |
| V | M | M | M | M | M | M | M | M | M | M | M | M | M | M | M | Ya | Ya | T | T | Ya | Ya | Ya | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 20 | 0 | 0 | 0 | 15 | 5 | 2 | 22 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **Jami** | **180** | **120** | **29** | **5** | **21** | **5** | **50** | **230** |

| | Nazariy va amaliy ta'lim |
|---|---|
| M | Malakaviy amaliyot |
| K | Kredit ta'lim tizimiga kirish |
| A | Attestatsiyalar |
| Ya | Yakuniy davlat attestatsiyasi |
| T | Ta'til |

## II. O'QUV REJASI

| T\r | Fanning malakaviy kodi | O'quv fanlari, bloklar va faoliyat turlarining nomlari | Talabaning o'quv tuklamasi, soatlarda: Umumiy yuklama hajmi | | Auditoriya mashg'ulotlari, soatlarda: Jami | Ma'ruza | Amaliy | Laboratoriya | Seminar | Kurs ishi | Mustaqil ta'lim | Soatlarning kurs, semestr va haftalar bo'yicha taqsimoti | | | | | | | | | Kreditlarning kurs, semestr va haftalar bo'yicha taqsimoti | | | | | | | | | Jami kreditlar |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 1-kurs | | 2-kurs | | 3-kurs | | 4-kurs | | 5-kurs | 1-kurs | | 2-kurs | | 3-kurs | | 4-kurs | | 5-kurs | |
| | | | | | | | | | | | | Kurslardagi haftalar soni | | | | | | | | | Kurslardagi haftalar soni | | | | | | | | | |
| | | | | | | | | | | | | 40 | | 40 | | 40 | | 40 | | 20 | 40 | | 40 | | 40 | | 40 | | 20 | |
| | | | | | | | | | | | | Semestrlar | | | | | | | | | Semestrlar | | | | | | | | | |
| | | | | | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| | | | | | | | | | | | | Semestrdagi auditoriya mash-g'ulotlari haftalarining soni | | | | | | | | | Kreditlar taqsimoti | | | | | | | | | |
| | | | соат | % | | | | | | | | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 15 | 255 |
| **1** | | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** | **24** | **25** | **26** | **27** | **28** | **29** | **30** |
| **1.00** | | **Мажбурий фанлар** | **5040** | | **1980** | **900** | **646** | **390** | **44** | **0** | **3060** | **20** | **20** | **20** | **20** | **14** | **16** | **14** | **8** | **0** | **26** | **26** | **26** | **24** | **18** | **20** | **16** | **12** | **0** | **168** |
| 1.01 | O'YaT1104 | O'zbekistonning eng yangi tarixi | **120** | | 30 | 16 | | | 14 | | 90 | 2 | | | | | | | | | 4 | | | | | | | | | **4** |
| 1.02 | FAL1404 | Falsafa | **120** | | 30 | 16 | | | 14 | | 90 | | | | 2 | | | | | | | | | 4 | | | | | | **4** |
| 1.03 | RT1204 | O'zbek (rus) tili | **120** | | 30 | | 30 | | | | 90 | | | 2 | | | | | | | | | 4 | | | | | | | **4** |
| 1.04 | XT1408 | Xorijiy til | **180** | | 60 | | 60 | | | | 120 | 2 | 2 | | | | | | | | 2 | 4 | | | | | | | | **6** |
| 1.05 | UZTQ1102 | O'zbek tilini sohada qo'llanilishi | **60** | | 30 | 14 | 16 | | | | 30 | | | | | 2 | | | | | | | | | 2 | | | | | **2** |
| 1.06 | MAN1202 | Ma'naviyatshunoslik | **60** | | 30 | 14 | | | 16 | | 30 | | 2 | | | | | | | | | 2 | | | | | | | | **2** |
| 1.07 | FIZ1107 | Fizika 1 | **240** | | 60 | 30 | | 30 | | | 180 | 4 | | | | | | | | | 8 | | | | | | | | | **8** |
| 1.08 | FIZ1105 | Fizika 2 | **120** | | 60 | 30 | | 30 | | | 60 | | 4 | | | | | | | | | 4 | | | | | | | | **4** |
| 1.09 | CHA1205 | Chiziqli algebra | **180** | | 60 | 30 | 30 | | | | 120 | 2 | 2 | | | | | | | | 2 | 4 | | | | | | | | **6** |
| 1.10 | DIFT1205 | Differensial tenglamalar | **180** | | 60 | 30 | 30 | | | | 120 | | | 2 | 2 | | | | | | | | 4 | 2 | | | | | | **6** |
| 1.11 | DAS1107 | Dasturlash 1 | **180** | | 90 | 30 | | 60 | | | 90 | 6 | | | | | | | | | 6 | | | | | | | | | **6** |
| 1.12 | DAS1106 | Dasturlash 2 | **180** | | 90 | 30 | | 60 | | KI | 90 | | 6 | | | | | | | | | 6 | | | | | | | | **6** |
| 1.13 | MA1209 | Matematik analiz (Calculus) | **300** | | 120 | 60 | 60 | | | | 180 | 4 | 4 | | | | | | | | 4 | 6 | | | | | | | | **10** |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.14 | MB1106 | Ma’lumotlar bazasi | **240** | | 90 | 30 | | 60 | | | 150 | | | 6 | | | | | | | | | 8 | | | | | | | **8** |
| 1.15 | KXA1106 | Kiberxavfsizlik asoslari | **180** | | 60 | 30 | 30 | | | | 120 | | | | | | | | 4 | | | | | | | | | 6 | | **6** |
| 1.16 | MTA1107 | Ma’lumotlar tuzilmasi va algoritmlar | **180** | | 90 | 30 | 60 | | | **KI** | 90 | | | 6 | | | | | | | | | 6 | | | | | | | **6** |
| 1.17 | DTZ1207 | Diskret tuzilmalar | **240** | | 90 | 60 | 30 | | | | 150 | | | 4 | 2 | | | | | | | | 4 | 4 | | | | | | **8** |
| 1.18 | KTE1104 | Kompyuterni tashkil etilishi | **120** | | 60 | 30 | 30 | | | | 60 | | | | 4 | | | | | | | | | 4 | | | | | | **4** |
| 1.19 | WEB1106 | Web dasturlashga kirish | **180** | | 90 | 60 | | 30 | | | 90 | | | | 6 | | | | | | | | | 6 | | | | | | **6** |
| 1.20 | AL1104 | Algoritmlarni loyihalash | **120** | | 60 | 30 | | 30 | | | 60 | | | | | | | 4 | | | | | | | | | 4 | | | **4** |
| 1.21 | DIK1104 | Dasturiy injiniringga kirish | **120** | | 60 | 30 | 30 | | | | 60 | | | | 4 | | | | | | | | | 4 | | | | | | **4** |
| 1.22 | KT1107 | Kompyuter tarmoqlari | **180** | | 60 | 30 | | 30 | | | 120 | | | | | | | | 4 | | | | | | | | | 6 | | **6** |
| 1.23 | DTTL1107 | Dasturiy ta’minot tizimlarini loyihalash | **180** | | 60 | 30 | | 30 | | **KI** | 120 | | | | | 4 | | | | | | | | | 6 | | | | | **6** |
| 1.24 | IMI1105 | Inson - kompyuter o‘zaro ta’siri | **120** | | 60 | 30 | 30 | | | | 60 | | | | | 4 | | | | | | | | | 4 | | | | | **4** |
| 1.25 | DUP1505 | Dasturlash uslublari va paradigmalar | **180** | | 60 | 30 | 30 | | | | 120 | | | | | 4 | | | | | | | | | 6 | | | | | **6** |
| 1.26 | OT1106 | Operatsion tizimlar | **180** | | 60 | 30 | 30 | | | | 120 | | | | | | 4 | | | | | | | | | 6 | | | | **6** |
| 1.27 | DTA1104 | Dasturiy ta’minot arxitekturasi | **120** | | 60 | 30 | 30 | | | | 60 | | | | | | 4 | | | | | | | | | 4 | | | | **4** |
| 1.28 | DTST1104 | Dasturiy ta’minot sifatini ta’minlash | **120** | | 60 | 30 | 30 | | | | 60 | | | | | | 4 | | | | | | | | | 4 | | | | **4** |
| 1.29 | MIYA1106 | Mobil ilovalarini ishlab chiqish | **180** | | 60 | 30 | | 30 | | | 120 | | | | | | 4 | | | | | | | | | 6 | | | | **6** |
| 1.30 | DTQE1107 | Dasturiy ta’minot qurilmasi va evolyutsiyasi | **180** | | 60 | 30 | 30 | | | | 120 | | | | | | | 4 | | | | | | | | | 6 | | | **6** |
| 1.31 | DTLB1107 | Dasturiy ta’minot loyihalarini boshqarish | **180** | | 90 | 30 | 60 | | | | 90 | | | | | | | 6 | | | | | | | | | 6 | | | **6** |
| **2.00** | | **Tanlov fanlari** | **1080** | | **420** | **180** | **240** | | | | **660** | | | | | **6** | **4** | **6** | **12** | | | | | | **8** | **4** | **10** | **14** | | **36** |
| 2.01 | KG2508<br>3DM2508 | 1) Kompyuter grafikasi<br>2) 3D modellashtirish | **300** | | 120 | 60 | 60 | | | | 180 | | | | | | | **4** | **4** | | | | | | | | **6** | **4** | | **10** |
| 2.02 | SINTT2508<br>RTA2508 | 1) Sun’iy intelekt va neyron to‘rli texnologiyalar<br>2) Robototexnika asoslari | **120** | | 60 | 30 | 30 | | | | 60 | | | | | **4** | | | | | | | | | **4** | | | | | **4** |
| 2.03 | ATLB2708<br>SHKXK270 | 1) Axborot tizimlari loyihalarini boshqarish<br>2) Shaxsiy kompyuterlarga xizmat ko`rsatish | **240** | | 90 | 30 | 60 | | | | 150 | | | | | **2** | **4** | | | | | | | | **4** | **4** | | | | **8** |
| 2.04 | KBT2704<br>TBT2704 | 1) Kontentni boshqarish tizimlari (CMS)<br>2) Multimedia texnologiyalari | **240** | | 90 | 30 | 60 | | | | 150 | | | | | | | **2** | **4** | | | | | | | | **4** | **4** | | **8** |
| 2.04 | WIYA2704<br>TBT2704 | 1) Web ilovalar yaratish<br>2) Multimedia texnologiyalari | **180** | | 60 | 30 | 30 | | | | 120 | | | | | | | | **4** | | | | | | | | | **6** | | **6** |
| | | **Jami** | **6120** | **0** | **2400** | **1080** | **886** | **390** | **44** | **3 KI** | **3720** | **20** | **20** | **20** | **20** | **20** | **20** | **20** | **20** | **0** | **26** | **26** | **26** | **24** | **26** | **24** | **26** | **26** | **0** | **204** |
| | | **Malakaviy amaliyot** | **630** | | 0 | | | | | | 630 | | | | | | | | | | | | | 2 | | 2 | | 2 | 15 | **21** |
| | | **Yakuniy davlat attestatsiyasi** | **450** | | 0 | | | | | | 450 | | | | | | | | | | | | | | | | | | 15 | **15** |
| | | **Attestatsiya** | | | | | | | | | | | | | | | | | | | | | | | | | | | | **0** |
| | | **Jami** | **1080** | | **0** | | | | | | **1080** | | | | | | | | | | | | | **2** | | **2** | | **2** | **30** | **36** |
| | | **Hammasi** | **7200** | **0** | **2400** | **1080** | **886** | **390** | **44** | **3 KI** | **4800** | **20** | **20** | **20** | **20** | **20** | **20** | **20** | **20** | **0** | **26** | **26** | **26** | **26** | **26** | **26** | **26** | **28** | **30** | **240** |

**Izoh:**
1) 1 kredit 30 akademik soatni tashkil qiladi.
2) Harbiy tayyorgarlik mashg‘ulotlari tanlov fanlar blokiga kiritiladi, harbiy yig‘in esa ta’til vaqti hisobiga o‘tkaziladi.
3) Kurs loyiha, kurs ishlari uchun talabaga mustaqil ta’lim soatlaridan 30 akademik soatni aajratgan holda 1 kredit beriladi.
4) Yakuniy davlat attestatsiyasi muddatlari tarkibiga bitiruv malakaviy ishini himoya qilish ham kiradi.
5) O‘quv rejaga kiritiladigan ixtisoslikka oid fanlarning amaliy mashg‘ulotlari va laboratoriya ishlari oliy ta’lim muassasasi hamda bazaviy tashkilot va korxonalarda o‘tkaziladi.

| O‘quv jarayonining tarkibiy qismlari | Haftalar soni | Semestr | Davlat attestatsiyasi |
|---|---|---|---|
| Nazariy va amaliy ta’lim | 120 | 1-8 | Bitiruv malakaviy ishini himoya qilish yoki ixtisoslik fanlaridan Davlat attestatsiyasi |
| Malakaviy amaliyot | 21 | 4, 6, 8,9 | |
| Attestatsiyalar | 29 | 1-9 | |
| Yakuniy davlat attestatsiyalari | 5 | 9 | |
| Ta’tillar | 50 | 1-9 | |
| Kredit ta’lim tizimiga kirish | 5 | 1 | |
| **Jami** | **230** | | |

O`zbekiston Respublikasi Oliy va o`rta maxsus ta`lim vazirligi Buxoro davlat universiteti kengashida maqullangan.
2021 yil “__” __________ dagi ___ - sonli bayonnomasi

**BuxDU o‘quv ishlari bo‘yicha prorektor v.v.b.** — **R.G‘. Jumayev**

**O‘quv-uslubiy bo‘lim boshlig‘i** — **R.G‘. Jumayev**

**Axborot texnologiyalari fakuleti dekani v.v.b.** — **H.I. Eshankulov**

**Amaliy matematika va dasturlash texnologiyalari kafedrasi mudiri** — **O.I.Jalolov**

**Axborot texnologiyalari kafedrasi mudiri** — **T.R. Shafiyev**

**Kadrlar buyurtmachisi:**

**Buxoro viloyati Xalq ta'limi boshqarmasi boshlig'i** — **D.N.Mustafayeva**