


"I APPROVE"
 Department head:  Phd X. A. Davlonov
 " " " " 2022 year

SCIENCE PROGRAM IMPLEMENTATION CALENDAR PLAN
 (lecture, practical, laboratory training and independent education)

Faculty : Oil and gas	Address : 60730300 – Building and structures construction (oil and gas again work industry objects)	Academy group BS-134-135-136-21	Lecture, hour	30
Subject name : Heat technique			Practical	16
Speaker :		H.A. Almarданov	Laboratory	14
Conductor of laboratory and practical training:		H.A Almarданov	Independent work	60
Independent training provider:		H.A Almarданov	term paper	-
			Total	120

No	of the subject name	Separated hour	Done about information			Teacher signature
			Month and day	Hours the number		
Lecture						
1	"Heat technique" science login.	2				
2	Heat capacity .	2				
3	Ideal gases mixtures .	2				
4	of energy keep and rotation law	2				
5	Main thermodynamic of processes analysis .	2				
6	the II law of thermodynamics definitions	2				
7	Water steam Evaporation and condensation .	2				
8	Heat exchange basics .	2				
9	Convective heat exchange basics .	2				
10	Radiation . Radiation method with heat of exchange main laws .	2				
11	Heat exchange devices .	2				
12	Compressor .	2				
13	Cooling cars and their cycles	2				
14	Fuel. Fuel properties . Solid, liquid and gaseous fuel.	2				
15	Heat pumps	2				
Total		30				

Practical training

1	Main thermodynamic situation parameters .	2				
2	Ideal gas mixtures.	2				
3	Izo bar r, iso xo r, isothermal processes, adiabatic and polytropical processes .	2				
4	Circulation processes - Carnot cycle _	2				
5	Internal combustion engine cycles.	2				
6	Flat the wall and cylindrical of the walls heat permeability .	2				
7	Heat flexibility .	2				
8	Heat exchange devices .	2				
TOTAL		16				
Laboratory training						
1	Pressure temperature measure tools .	4				
2	Air heat capacity to determine	2				
3	Pipe shaped insulating the material heat conductivity coefficient to determine	2				
4	Horizontal of the pipe heat flexibility coefficient to determine	2				
5	CO-7A compressor structure and performance with get to know	4				
TOTAL		14				
Independent educational activities						
1.	Ideal gas equations of state	4				
2	Mixtures of ideal gases	4				
3	Heat capacities of ideal gases	4				
4.	The first law of thermodynamics	4				
5	Isothermal, isobaric, isochoric, adiabatic and polytropic processes	4				
6	The second law of thermodynamics	4				
7	Circular processes Carnot cycle	4				
8	Thermal conductivity of a flat and cylindrical wall	4				
9	Thermal conductivity	4				
10	Laws of heat exchange by radiation	4				
11	Heat exchange devices	4				
12	Gas turbine devices	4				
13	Compressor devices	4				
14	Internal combustion engines	4				
15	Heat energy devices	4				
TOTAL		60				

Science teacher :



H.A. Almagardanov