Bachelor program,
Instrumentation engineering (INEN) program, "Instrumentation engineering" department

Course Unit Title	Bachelor's Thesis (Graduation work)
Course Unit Code	BT
Type of Course Unit	Compulsory
Level of Course Unit	4th year INEN program
National Credits	0
Number of ECTS Credits Allocated	9
Theoretical (hour/week)	-
Practice (hour/week)	8
Laboratory (hour/week)	-
Year of Study	4
Semester when the course unit is delivered	8
Course Coordinator	-
Name of Lecturer (s)	-
Name of Assistant (s)	-
Mode of Delivery	Face to Face
Language of Instruction	English
Prerequisites	-
Recommended Optional Programme Components	-

Course description:

The bachelor's thesis is independent work undertaken by the student under the guidance of academic staff as a finalization of a bachelor's degree, during the last semester.

Objectives of the Course:

The main objective of a bachelor's thesis is for the student to independently apply the theoretical and practical knowledge acquired during his/her studies at a higher education institution within the framework of a project or research project. The thesis provides the student with the opportunity to demonstrate his/her research skills, technical analysis skills and written presentation skills in the chosen field.

Practical Training Outcomes

At the end of the practical training the student will be able to		Assessment
1.	Apply technical knowledge in developing engineering products to simplify day to day conveniences	1
2.	Demonstrate capability of self-education and clearly understand the value of achieving perfection in project implementation & completion	1
3.	Demonstrate the importance of teamwork and a multi-disciplinary approach	1
4.	Demonstrate professionalism with ethics; present effective communication skills and relate engineering issues to broader societal context	1
5.	Develop technical documentation and user manual of engineering products	1
6.	Identify and analyze problems of the society and arrive at appropriate solutions	1

Assessment Methods: 1. Bachelor Thesis (Graduation work)

Course's Contribution to Program

		CL
1	Ability to develop as a specialist in the field of fundamental sciences and apply basic knowledge.	5
2	Ability to analyze and model functional and structural schemes of various purpose devices and systems.	5
3	Ability to use modern methods and tools, creation, selection, and application of engineering and information technology tools and modern devices and equipment.	5
4	The ability to use the strategy of team cooperation in the exchange of information, knowledge, and experience to achieve the set goal.	5
5	As a result of training, the ability to use engineering knowledge, mathematical models, and basic concepts of physics and chemistry in production and technological processes, automation, measurement, and control systems.	5
6	The ability to use modern software to process technical documents of devices, design their structures, and algorithmize processes.	5
7	The ability to apply artificial intelligence to improve the quality characteristics of	5

	measurement and control systems.	
8	The ability to process information acquisition, processing, and transmission processes based on schematic and programmable logical integrated circuits.	5
9	Ability to use knowledge to improve quality indicators and environmental safety of production processes.	5
10	Self-development ability to apply theoretical and experimental knowledge in solving modern engineering problems.	5

CL: Contribution Level (1: Very Low, 2: Low, 3: Moderate, 4: High, 5: Very High)

Course Contents

Week	Chapter	Topics	Exam
1	•	Selection and coordination of the topic of the graduation work, preparation of a preliminary plan with the supervisor	
2	•	Literature review, analytical analysis and preliminary studies	
3	•	Literature review, analytical analysis and preliminary studies	
4	•	Literature review, analytical analysis and preliminary studies	
5	•	Preparation of the technical or scientific part of the final graduation work (calculations, models, research)	
6	•	Preparation of the technical or scientific part of the final graduation work (calculations, models, research)	
7	•	Preparation of the technical or scientific part of the final graduation work (calculations, models, research)	
8	•	Obtaining practical results and their interpretation	
9	•	Obtaining practical results and their interpretation	
10	•	Writing and completing a graduation work	
11	•	Writing and completing a graduation work	
12	•	Writing and completing a graduation work	
13	•	Evaluation of the graduation work by the supervisor and making edits	
14	•	Preparing a presentation for the defense	
15			Defense of graduation work (at a university or at the enterprise)

Recommended Sources
TEXTBOOK(S)

- The necessary literature and references to sources are provided to each student individually by the graduation work supervisor.

Assessment

Attendance	0%	
Presentation	0%	
Lab	0%	
Quiz	0%	
Midterm Exam	0%	
Graduation work and presentation	50%	Written
Defense of graduation work	50%	Oral
Total	100%	

Assessment Criteria
Final grades are determined according to the Academic Regulations of Azerbaijan State Oil and İndustry University for undergraduate studies

Graduation Work Policies

- Choose a topic in a timely manner and work according to the plan;
- Comply with the rules of plagiarism and scientific ethics;

- Follow the structure and format of the graduation work (including introduction, literature review, research and conclusion);
- Meet regularly with the supervisor;
- Submit a written report and presentation within the established deadlines.

ECTS allocated based on Student Workload

Activities	Number	Duration (hour)	Total Workload (hour)
Graduation work duration	14	8	112
Self-study	14	5	70
Tutorials	14	4	56
Preparation of graduation work and presentation	1	31.5	31.5
Defense of graduation work	1	0.5	0.5
Total Workload			270
Total Workload/30(h)			9
ECTS Credit of the Course			9