SYLLABUS

General	Title and code of subject,	ETR 482 Electronic Systems and Technology-6 ECTS credits			
information	number of credits				
	Department	Physics and Electronics			
	Program	Bachelor			
	Academic semester	Spring 2021			
	Lecturer	Master of Science (Electronics Engineer	ring)		
		Sabuhi Ganiyev			
	E-mail:	<u>s.ganiyev@gmail.com</u>			
	Phone number:	+994 77 520 73 50			
	Lecture room/Schedule	11 Mehseti Street, AZ1096 Baku, Azer	baijan (Neftchilar campus),		
		room			
	Consultations	Saturday 13:00 – 14:00			
Course	English				
language					
Prerequisites	ETR 234 – Analog and Digital E	lectronics			
Trans of the	Maian				
Type of the	Major				
Subject	Tarthooks				
additional	1 The ECE Handbook Electron	aios Systems and Technologies By Eng	r Santas S. Cuarua 2nd		
materials	edition 2013	thes systems and rectificlogies, by Eng	I. Santos S. Cuervo, 2nd		
materials	2 Control Systems for Power Fle	ectronics Patil Mahesh Rodev Pankai	2015		
	3. Electrical Engineering: Princir	bles and Applications, Allan R. Hambley	v. 6th Edition. 2014		
	4. Sensors and tranducers. Ian R. Sinclair. 3rd Edition 2001				
	5. Attenuator Overview - a brief review of key specifications for fixed and step attenuators				
	Agilent.1998	J. I. J. I.	I		
	6. Power electronics handbook,	Muhammad H. Rashid, 2001.			
70 I I	T 4				
Teaching	Lecture		X		
methods	Group discussions at seminars		X X		
Teaching methods Assessment	Group discussions at seminars Components	Date/ Deadline	x x Percent (%)		
Teaching methods Assessment	Interview Group discussions at seminars Components Active participation	Date/ Deadline At each lesson	x x Percent (%) 5		
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Participation of students at all classis is important. Students should inform dean's office about missing
lessons for particular reasons (illness, family issues and etc.). Students, missing more than
30% of lessons, are not allowed to take the exam.
Quizzes
Those students who have informed the teacher and the dean's office about missing the quiz in advance
for particular reasons, are allowed to take the quiz next week.
Exams
All the issues related to the participation and admission to the exam are regulated by the faculty dean.
Topics of midterm and final exams are provided for the students before the exams. The questions of
midterm exam are not repeated in the final exam.
Violation of the rules of the exams
Disrupting the quiz and taking copy during midterm and final exams is forbidden. Quiz papers of the
student who do not follow these rules are canceled and the students are expelled from the quiz by
getting (zero).
The rule for completing the course
In accordance with the University rules the overall success rate to complete the course should be 60%
or above. The students who failed the exam would be to take this subject next semester or next year.
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This program reflects the comprehensive information about the subject and information about any changes will be provided in advance.

Week	Dates	Subject topics	Textbook/
	(planned)		Assignments
1	11.02	<i>Electronic systems</i> : electronic systems categories, communications systems, control systems, parts of electronic system <i>Questions and Exercises</i>	[1]
2	18.02	Communication Systems: communication model, transmission line, and data communication Questions and Exercises	[1]
3	25.02	<i>Communication Systems:</i> communication model, transmission line, and data communication <i>Questions and Exercises,</i>	[1]
4	04.03	Communication Systems: communication model, transmission line, and data communication Questions and Exercises. Quiz 1(Lec1-Lec3)	[1]
5	11.03	<i>Control systems</i> : history of automatic control, modern control systems, future evolution of control systems, design examples <i>Questions and Exercises</i> .	[2]
6	18.03	<i>Control systems:</i> feedback, mathematical models, electrical analogies of mechanical systems, block diagrams, signal flow graphs, time response analysis <i>Questions and Exercises</i> .	[2]
7	25.03	Public holiday	
8	01.04	Sensors-Transducers and Actuators:. Introduction. Principles of sensoers- tranducers and actuators. Classification and characteristics. Questions and Exercises. Quiz 2(Lec4-Lec6)	[4] [5]
9	08.04	Mid term exam	
10	15.04	Sensors-Transducers and Actuators: Introduction. Principles of sensoers- tranducers and actuators. Classification and characteristics. Questions and Exercises	[4] [5]
11	22.04	Sensors-Transducers and Actuators: Introduction. Principles of sensoers- tranducers and actuators. Classification and characteristics. Questions and Exercises	[4] [5]

12	29.04	DC machines: Overview of motors. Principles of DC machines. Rotating DC machines. Shunt-connected and separately excited DC motor. Series-connected DC motors. Speed control of DC motors. DC generators. Questions and Exercises. Quiz 3(Lec6-Lec9)	[3]
13	06.05	Power Electronics for Renewable Energy Sources: Power electronics for photovoltaic power systems, Power electronics for wind power systems. Questions and Exercises	[6]
14	13.05	Power Electronics for Renewable Energy Sources: Power electronics for photovoltaic power systems, Power electronics for wind power systems. Questions and Exercises	[6]
15	20.05	Recap of all covered material Quiz 4(Lec9-Lec12)	
		Final Exam	

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