



ESCUELA SUPERIOR POLITÉCNICA DEL LITORAL
Faculty of Electrical and Computer Engineering
COURSE SYLLABUS
Telecommunications Regulatory Framework

1. CODE AND NUMBER OF CREDITS

CODE	FIEC05348	
NUMBER OF CREDITS : 4	Theoretical: 4	Practical: 0

2. COURSE DESCRIPTION

The course of the *Telecommunications Regulatory Framework* has a fundamental importance in the academic preparation of an engineer in Electronics and Telecommunications. The course will provide the students the legal framework in which the engineer will develop its activities, will complement a great deal of essential technical definitions in the telecommunication field, and will display the application of many technical concepts acquired in different subjects of their penum. This course is developed following the structure of the Kelsen pyramid, studying the basics of the Information Society, the international telecommunications organizations and its main legal instruments, the review of the ecuadorian constitutional provisions relating to telecommunications, the national organizations for administration and control of telecommunications, and finally the study of the national telecommunication regulatory framework.

3. PRE-REQUISITES AND CO-REQUISITES

PRE-REQUISITES	FIEC04960 DIGITAL COMMUNICATIONS FIEC00729 PROPAGATION (CE)
CO-REQUISITES	

4. CORE TEXT AND OTHER REQUIRED REFERENCES FOR THE TEACHING OF THE COURSE

CORE TEXT	1." El Derecho de las Telecomunicaciones en el Ecuador", Second Edition, 2012, Dr. Freddy Villao Quezada, Ph.D.
REFERENCES	1. Constitution and Convention of the International Telecommunication Union (ITU) 2. Outcomes of the World Summit of the Information Society 3. Ecuador Republic Constitution 4. Ecuadorian Plan of Good Living 5. Telecommunication Development National Plan 6. National Council of Telecommunication (CONATEL) resolutions and rules

5. COURSE LEARNING OUTCOMES

At the end of the course, the student will be able to:

1. Understanding the basics of the Information Society
2. Know the international organizations, regional and national, which manage and control the telecommunications sector.
3. Understand and interpret correctly the legal framework in which the student will develop their professional activity
4. Apply the appropriate regulation in the corresponding telecommunication project
5. Broadly know the rights and obligations of both telecom operators and consumers
6. Identify current regulatory issues in the telecommunications field and be able to issue critical opinion on it
7. Suggest Ecuadorian regulatory framework reforms for better development of telecommunications in Ecuador

6. COURSE PROGRAM

- I. The Information Society (4 hours)
- Declaration of Principles
 - Plan of Action



<ul style="list-style-type: none"> Tunis Agenda for the Information Society
II. The international organizations for telecommunications (4 hours) <ul style="list-style-type: none"> International Telecommunication Union (ITU) Inter-American Telecommunication Commission (CITEL) Andean Committee of Telecommunication Authorities (CAATEL)
III. Legal framework of telecommunication in Ecuador (22 hours) <ul style="list-style-type: none"> Ecuador Constitution and the telecommunications Plan of Good Living and the Information Society Telecommunication Development Plan Telecommunication Law Law for Ecuador Transformation General Rules for the Telecommunication Law Law for consumer protection in the telecommunication aspects
IV. The Ecuadorian organizations for the administration and control of telecommunications (4 hours) <ul style="list-style-type: none"> National Council of Telecommunication (CONATEL) National Secretary of Telecommunication (SENATEL) Superintendence of Telecommunication (SUPERTEL)
V. Specific Regulatory Framework for Telecommunications in Ecuador (22 hours) <ul style="list-style-type: none"> Main telecommunication regulations Main resolutions for telecommunication operators Study cases

7. WORKLOAD: THEORY/PRACTICE

Two weekly sessions of two hours each class, which includes 30 minutes each session for presentation of research projects of students

8. CONTRIBUTION OF THE COURSE TO THE EDUCATION OF THE STUDENT

The course of Telecommunications Regulatory Framework contributes to the academic and professional training enabling students to know the legal framework in which will develop your profession, complement a great deal of essential technical definitions in the area of Telecommunications, and facilitate the implementation of many concepts acquired in the other courses of their curriculum.

BASIC TRAINING	PROFESSIONAL TRAINING	SOCIAL SKILLS DEVELOPMENT
	X	

9. THE RELATIONSHIP BETWEEN THE LEARNING OUTCOMES OF THE COURSE AND THE LEARNING OUTCOMES OF THE DEGREE PROGRAM

LEARNING OUTCOMES OF THE DEGREE PROGRAM*	CONTRIBUTION (High, Medium, Low)	LEARNING OUTCOMES OF THE COURSE**	THE STUDENT MUST:
a) An ability to apply knowledge of mathematics, science and engineering.	Medium	4	Interpret mathematical formulas for calculating the rates for use of frequencies
b) An ability to design and conduct experiments, and to analyze and interpret data	Medium	1	Analyze data and measurement results on the implementation of the Information Society
c) An ability to design a system, component or process to satisfy realistic	High	3	Develop telecommunications projects in strict compliance with regulatory requirements



constraints.			
d) An ability to function on multidisciplinary teams.	Medium	2	Coordinate international and local regulations that relate to their telecommunication activities
e) An ability to identify, formulate and solve engineering problems.	High	4	Apply correctly telecommunications regulation corresponding to engineering problem in question. Able to apply for certificates to provide telecommunication services
f) An understanding of ethical and professional responsibility.	High	5	Be aware that the professional activity should be subjected to the Telecommunication Law.
g) An ability to communicate effectively.	High	6	Comment about the regulatory telecommunication problems in Ecuador
h) A broad education necessary to understand the impact of engineering solutions in a social, environmental, economic and global context.	High	6	Develop a critical spirit that allows comment on the impact on society of the development of Information and Communication Technologies (ICT)
i) A recognition of the need for, and an ability to engage in life-long learning.	High	1	Being convinced that the rapid evolution of ICTs will be required to be permanently updated
j) A knowledge of contemporary issues.	High	6	Know deeply the WSIS Declaration of Principles and Plan of Action, goals and measuring of the Information Society
k) An ability to use the techniques, skills, and modern tools necessary for engineering practice.	High	7	Effectively use their expertise in telecommunication regulation to successfully perform their projects in this field
l) Capacity to lead, manage and undertake projects.	---		

10. EVALUATION IN THE COURSE

Evaluation activities	
Exams	x
Tests	x
Homework/tasks	
Projects	x
Laboratory/Experiments	
Class participation	
Visits	
Other	

11. PERSON RESPONSIBLE FOR THE CREATION OF THE SYLLABUS AND THE DATE OF ITS CREATION

Created by	Freddy Villao Quezada, Ph.D.
Date	3 May2013



12. APPROVAL

ACADEMIC SECRETARY OF THE ACADEMIC DEPARTMENT	DIRECTOR OF TECHNICAL ACADEMIC SECRETARY
NAME: Mrs. Leonor Caicedo G.	NAME: Ing. Marcos Mendoza
SIGNATURE: 	SIGNATURE:
Date of approval by the Directive Council: 2013-537 2013-10-7	ESCUELA SUPERIOR POLITÉCNICA DEL LITORAL ----- Ing. Marcos Mendoza V. DIRECTOR DE LA SECRETARIA TÉCNICA ACADÉMICA

13. VALIDITY OF THE SYLLABUS

RESOLUTION OF THE POLYTECHNIC BOARD:	13-12-343
DATE:	2013-12-12