

URV Engineering School (ETSE) – Course 2020-21 –

Subjects offered in English (Bachelor Degrees)

General information for incoming mobility students is available [here](#).

The tables in this document show, from left to right, the name of the course (with a link to a web page with more detailed information about the content and evaluation of the course), the semester in which it is offered (*Fall*- September to January, *Spring*-February to June), the number of ECTS and the code of the course.

Electronic and Automation Engineering-GEEliA

TECHNICAL ENGLISH	Spring	6	17204102
ENGINEERING HISTORY	Fall	6	17204207
EMBEDDED SYSTEMS	Fall	3	17204206

Electrical Engineering-GEE

TECHNICAL ENGLISH	Spring	6	17214102
ENGINEERING HISTORY	Fall	6	17214216

Computer Engineering – GEI

TECHNICAL ENGLISH	Spring	6	17234102
ENGINEERING HISTORY	Fall	6	17234207
MOBILE AND EMBEDDED APPLICATIONS	Fall	6	17234125

Techniques for Developing Web and Mobile Applications – GTDAWIM

No courses offered in English.

Biomedical Engineering-GEB

OMICS TECHNOLOGY AND DATA HANDLING	Fall	4.5	17254112
BIOMEDICAL IMAGE PROCESSING	Spring	4.5	17254119
COMPUTATIONAL BIOLOGY AND ANALYSIS OF BIOMEDICAL DATA	Spring	4.5	17254115
BIOMATERIALS ENGINEERING AND TISSUE REGENERATION I	Spring	3	17254116
BIOMECHANICS II	Fall	4.5	17254123
INFRASTRUCTURE MANAGEMENT FOR HEALTH	Fall	6	17254126
INNOVATION AND ENTREPRENEURSHIP	Spring	4.5	17254128
PRACTICAL INTRODUCTION TO RESEARCH	Spring	3	17254204
SMART HEALTH	Spring	3	17254209
BIONANOTECHNOLOGIES AND BIOMEDICAL DEVICES	Spring	3	17254208

Telecommunication Systems and Services Engineering-GESST

TECHNICAL ENGLISH	Spring	6	17244102
INNOVATION AND ENTREPRENEURSHIP	Spring	6	17244131
EMBEDDED SYSTEMS	Spring	3	17244212
HISTORY OF ENGINEERING	Fall	6	17244209

URV Engineering School (ETSE) – Course 2020-21

Subjects offered in Catalan/Spanish in which the lecturers provide personalized tutoring services in English (course material, personalized learning support, exercises, exams, etc.)

Note: ERASMUS students are advised to check the availability of the English tutoring service in the subjects in which they are interested before starting the mobility process, by sending a message to the [mobility coordinator](#) of the degree.

Courses common to all bachelor degrees

BACHELOR'S THESIS (12 ECTS)

Electronic and Automation Engineering-GEEliA

<u>CHEMICAL FUNDAMENTALS OF ENGINEERING</u>	Fall	6	17204010
<u>CIRCUIT THEORY I / CIRCUIT THEORY II</u>	Fall / Spring	6 / 5	17204105 / 17204106
<u>STATISTICS AND TRANSFORMED METHODS</u>	Fall	6	17204009
<u>THERMODYNAMICS AND HYDRAULICS</u>	Fall	6	17204117
<u>FUNDAMENTALS OF ELECTRICAL INSTALLATIONS</u>	Spring	5	17204116
<u>FUNDAMENTALS OF ELECTRICAL MACHINES</u>	Spring	5	17204115
<u>FUNDAMENTALS OF ELECTRONICS</u>	Spring	5	17204107
<u>MACHINES AND MECHANISMS</u>	Spring	5	17204121
<u>SCIENCE AND RESISTANCE OF MATERIALS</u>	Spring	5	17204122
<u>ANALOGUE ELECTRONICS</u>	Fall	6	17204109
<u>DIGITAL ELECTRONICS</u>	Fall	6	17204108
<u>INDUSTRIAL COMPUTER SCIENCE I /INDUSTRIAL COMPUTER SCIENCE II</u>	Fall / Fall	6 / 6	17204119 / 17204120
<u>POWER ELECTRONICS</u>	Fall	6	17204110
<u>AUTOMATIC CONTROL</u>	Spring	6	17204123
<u>ELECTRONIC EQUIPMENT</u>	Spring	6	17204112
<u>INSTRUMENTATION</u>	Spring	6	17204113
<u>MICROCONTROLLERS</u>	Spring	6	17204111
<u>AUTOMATION</u>	Fall	6	17204103
<u>ELECTRONIC POWER SYSTEMS</u>	Fall	6	17204114
<u>SYSTEMS MODELLING AND PROCESS CONTROL</u>	Fall	6	17204124
<u>FINAL PROJECT</u>	Spring	3	17204126
<u>INDUSTRIAL ORGANISATION</u>	Spring	6	17204118
<u>ROBOTIZED SYSTEMS</u>	Spring	6	17204104
<u>AUDITING OCCUPATIONAL RISK PREVENTION</u>	Fall	3	17204214
<u>CONTROL OF ELECTRICAL MACHINES</u>	Fall	6	17204231
<u>OPTOELECTRONIC MECHANISMS AND SYSTEMS</u>	Fall	3	17204258
<u>AUTOMATION PERIPHERALS</u>	Spring	3	17204260
<u>INTRODUCTION TO MOBILE ROBOTS</u>	Spring	3	17204210
<u>MANAGING THE POWER OF ELECTRIC VEHICLES</u>	Spring	3	17204208
<u>PROJECT MANAGEMENT</u>	Spring	3	17204212
<u>RENEWABLE ENERGIES</u>	Spring	6	17204223

Electrical Engineering-GEE

<u>CHEMICAL FUNDAMENTALS OF ENGINEERING</u>	Fall	6	17214010
<u>CIRCUIT THEORY I / CIRCUIT THEORY II</u>	Fall / Spring	6 / 5	17214105 / 17214106
<u>STATISTICS AND TRANSFORMED METHODS</u>	Fall	6	17214009
<u>THERMODYNAMICS AND HYDRAULICS</u>	Fall	6	17214117
<u>FUNDAMENTALS OF ELECTRICAL MACHINES</u>	Spring	5	17214115
<u>FUNDAMENTALS OF ELECTRONICS</u>	Spring	5	17214107
<u>SCIENCE AND RESISTANCE OF MATERIALS</u>	Spring	5	17214122
<u>ELECTRICAL MACHINES</u>	Fall	6	17214120
<u>POWER ELECTRONICS</u>	Fall	6	17214110
<u>DESIGN OF ELECTRICAL MACHINES</u>	Spring	6	17214123
<u>FUNDAMENTALS OF AUTOMATIC CONTROL</u>	Spring	6	17214104
<u>RENEWABLE ENERGIES</u>	Spring	6	17214109
<u>AUTOMATION</u>	Fall	6	17214103
<u>CONTROL OF ELECTRICAL MACHINES</u>	Fall	6	17214124
<u>LIGHTING ENGINEERING</u>	Fall	3	17214113
<u>ENVIRONMENTAL TECHNOLOGIES</u>	Spring	3	17214112
<u>INDUSTRIAL ORGANISATION</u>	Spring	6	17214118
<u>POWER STATIONS</u>	Fall	6	17214108

Computer Engineering – GEI

<u>PROGRAMMING</u>	Fall	6	17234114
<u>DISCRETE MATHEMATICS II</u>	Spring	6	17234010
<u>COMPUTER STRUCTURE</u>	Spring	6	17234108
<u>ANALYSIS AND DESIGN OF APPLICATIONS</u>	Spring	6	17234105
<u>COMPUTER ARCHITECTURE</u>	Fall	6	17234109
<u>FORMAL LANGUAGES</u>	Spring	6	17234110
<u>ARTIFICIAL INTELLIGENCE</u>	Fall	6	17234128
<u>COMPILERS</u>	Fall	6	17234127
<u>REAL-TIME SYSTEMS</u>	Fall	6	17234124
<u>COMPUTERIZED VISION</u>	Spring	6	17234130
<u>ELECTRONIC COMMERCE SYSTEMS</u>	Spring	6	17234121
<u>INFORMATION SYSTEMS IN ORGANIZATIONS</u>	Spring	6	17234122
<u>NETWORK SECURITY</u>	Spring	6	17234120
<u>DATA NETWORKS</u>	Fall	6	17234118

Techniques for Developing Web and Mobile Applications – GTDAWIM

<u>PROGRAMMING</u>	Fall	6	17264114
<u>ANALYSIS AND DESIGN OF APPLICATIONS</u>	Spring	6	17264105
<u>NETWORK APPLICATION ARCHITECTURES</u>	Fall	6	17264122
<u>WEBSITE ENGINEERING</u>	Fall	6	17264125
<u>MOBILE APPLICATIONS AND SERVICES</u>	Spring	6	17264106
<u>NETWORK SECURITY</u>	Spring	6	17264123
<u>DATA NETWORKS</u>	Fall	6	17264118
<u>ADVANCED PROGRAMMING OF MOBILE DEVICES</u>	Fall	6	17264138

Biomedical Engineering-GEB

<u>PROGRAMMING</u>	Fall	6	17254013
<u>FUNDAMENTALS OF COMMUNICATION I / FUNDAMENTALS OF COMMUNICATION II</u>	Fall / Spring	6 / 6	17254015 / 17254106
<u>ANALYSIS OF LINEAR CIRCUITS AND SYSTEMS</u>	Fall	6	17254014
<u>DATA ANALYSIS AND BIOSTATISTICS</u>	Fall	6	17254105
<u>BIOFLUID MECHANICS</u>	Fall	6	17254010
<u>PHYSIOLOGY</u>	Spring	7.5	17254107
<u>ANALOGUE ELECTRONICS</u>	Spring	4.5	17254109
<u>BIOCHEMISTRY</u>	Spring	6	17254011
<u>BIOPHYSICS</u>	Spring	6	17254012
<u>DIGITAL ELECTRONICS</u>	Fall	6	17254108
<u>DIGITAL TREATMENT OF BIOSIGNALS</u>	Fall	6	17254113
<u>DATA NETWORKS AND INTERNET</u>	Fall	6	17254114
<u>PHYSIOPATHOLOGY</u>	Fall	4.5	17254111
<u>ADVANCED MEDICAL PHYSICS</u>	Fall	3	17254110
<u>SENSORS AND INSTRUMENTS FOR BIOMEDICINE</u>	Spring	4.5	17254120
<u>BIOMECHANICS I</u>	Spring	3	17254117
<u>TECHNOLOGIES FOR SENSOR NETWORKS, THE IOT AND SMART CITIES</u>	Spring	4.5	17254121
<u>BIG DATA INFRASTRUCTURES</u>	Spring	6	17254118
BIOMATERIALS ENGINEERING AND TISSUE REGENERATION II	Fall	3	17254122
LABORATORY OF SENSORS AND MOBILE TECHNOLOGIES FOR BIOENGINEERING	Fall	3	17254125
MEDICAL ROBOTICS	Fall	4.5	17254126
TELEMEDICINE	Spring	4.5	17254129
EQUIPMENT FOR MONITORING, DIAGNOSIS AND THERAPY	Spring	3	17254127

Telecommunication Systems and Services Engineering-GESST

<u>PROGRAMMING</u>	Fall	6	17244010
<u>ANALYSIS OF CIRCUITS AND LINEAR SYSTEMS</u>	Fall	6	17244009
<u>FUNDAMENTALS OF COMMUNICATION I / FUNDAMENTALS OF COMMUNICATION II</u>	Fall / Spring	6 / 6	17244103 / 17244108
<u>DIGITAL ELECTRONICS</u>	Fall	6	17244105
<u>DATA NETWORKS AND THE INTERNET</u>	Fall	6	17244104
<u>INFRASTRUCTURES FOR BIG DATA</u>	Spring	6	17244106
<u>ANALOGUE ELECTRONICS</u>	Spring	5	17244107
<u>WAVE TRANSMISSION AND PROPAGATION</u>	Spring	5	17244110
<u>RADIO-FREQUENCY ENGINEERING</u>	Spring	5	17244111
<u>TELECOMMUNICATIONS LABORATORY</u>	Spring	3	17244109
<u>DIGITAL SIGNAL PROCESSING</u>	Fall	6	17244113
<u>DIGITAL COMMUNICATIONS</u>	Fall	6	17244112
<u>EMITTERS AND RECEIVERS</u>	Fall	6	17244116
<u>ANTENNAS AND RADIOPROPAGATION</u>	Fall	6	17244119
<u>MICROCONTROLLERS AND EMBEDDED SYSTEMS</u>	Fall	6	17244117
<u>TECHNOLOGIES FOR SENSOR NETWORKS, THE INTERNET OF THINGS AND SMART CITIES</u>	Spring	4.5	17244121
<u>TELEPHONY AND MOBILE COMMUNICATIONS</u>	Spring	6	17244120
<u>SENSORS AND INSTRUMENTATION</u>	Spring	4.5	17244118
<u>TELECOMMUNICATION PROJECTS</u>	Fall	6	17244128
<u>BROADBAND AND OPTICAL COMMUNICATIONS</u>	Fall	6	17244134
<u>MOBILE SENSORS AND TECHNOLOGIES LABORATORY</u>	Fall	3	17244132
<u>INDUSTRIAL TELECOMMUNICATIONS AND ELECTROMAGNETIC COMPATIBILITY</u>	Spring	3	17244135
<u>TELEMEDICINE</u>	Spring	3	17244219
<u>NETWORK MANAGEMENT</u>	Spring	6	17244136
<u>MOBILE APPLICATIONS AND SERVICES LABORATORY</u>	Fall	3	17244228
<u>ADVANCED PROGRAMMING OF MOBILE DEVICES</u>	Fall	6	17244138
<u>ENERGY MANAGEMENT IN TELECOMMUNICATION SYSTEMS</u>	Fall	3	17244129
<u>NETWORK DESIGN / NETWORK SECURITY</u>	Fall / Spring	6 / 6	17244130 / 17244123
<u>DISTRIBUTED TELEMATIC SYSTEMS</u>	Spring	6	17244223
<u>NETWORK APPLICATION ARCHITECTURES</u>	Fall	6	17244213
<u>NETWORK MODELLING</u>	Fall	6	17244124
<u>WEBSITE ENGINEERING</u>	Fall	6	17244125
<u>MOBILE APPLICATIONS AND SERVICES</u>	Spring	6	17244115
<u>MULTIMEDIA SERVICES</u>	Spring	6	17244114