Procedures and criteria for evaluation and recognition of student's progress within course activities during the semester
Electronical Engineering and Telecomunications – Politehnica International Programme (4 year bachelor), Specialisation Telecommunications Systems Technology - 3rd year, 4th year

Study Program Missions

Didactic Mission	Developing researcher skills and enhancing the competence as specialists by improving the students abilities in design, modeling, simulation, testing and implementation of analog and digital circuits, in exploiting signal processing techniques, in using computer languages and specialized programs to design electronic circuits starting from the technical specifications and to study their operations, in different conditions.
Research Mission	Developing abilities in analysing, in extracting technical specifications for a specific circuit design, in developing systems architecture and in modeling electronic circuits using iterative design, computer simulation and testing in real-time. Developing students skills for working in research teams.

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1	III	Management and Marketing	• 2 written evaluation for 2 hours with 2 subjects from theory/courses (50% from mark) and one subject from seminars – a problem solving (50% from mark); every evaluation is 50% from the mark and it is 50% from final mark; • Evaluation criteria for theory: reproducing subjects from course material and discussions in the class; • Evaluation criteria for problem solving: 4 questions with 2/3/3/1 points (1 point from start) • For minimum mark is necessary a minimum mark of 5 for every subject of evaluation	• Student participation at seminars and courses, answering questions, working at table, solving problems and 2 homeworks (one from management part and one from marketing part) • The activity mark is 50% from the final mark

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2	III	Electronic Instrumentation	• Written exam including theory and applications. • Practical tests which are held in a laboratory room and presented in a written report. The average mark of these reports represents 1/3 of the final mark. • Minimum 2 examiners. • Written theoretical part – 2 questions. Written applications part – 5 questions. • The mark 5 means 50% correct answers for both theory and applications, • The mark 10 means 100% correct answers for both theory and applications. • The mark from the written exam including theory and applications represents 2/3 of the final mark. The written exam will be held in a course room. • The final mark will be computed if the marks from the written exam and the practical tests are both equal or greater than 5 and will be rounded according RODPI of UPT.	• The marks equal or greater than 5 for the exam and for the laboratory activity will be recognized unconditionally at any moment.
3	III	Radio Communications	• Distributed written examination in two sessions, with 2 examiners. • 10-12 questions, including 6-7 for theoretical knowledge, and 3-4 problems. • Final mark : 2/3*(1/3 theoretical knowledge + 2/3 problems solving)+ 1/3 seminar activity • Mark 5 : minimum 5 at theoretical knowledge, minimum 5 at problems solving and minimum 5 at seminar activity • Mark 10 : arithmetical mean greater than 9.5. • Provided by the faculty.	• The grade for the activity during the semester represents the simple average of the laboratory grade. The laboratory grade reflects the practical skills of the student, and the results obtained by short tests. • The grade 5 or higher for the written exam or for the activity during the semester, remains valid for any next examination.
4	III	Virtual Instrumentation	• Written exam and practical tests. • Practical tests which are held in a laboratory room. The average mark of these practical tests represents 25% from the final mark. • One multiple-choice evaluation with 30 questions. • Each question has 4 possible answers, only one correct. • Minimum 2 supervisors. • The mark 5 means 50% correct answers, • The mark 10 means 100% correct answers. • The mark from the multiple choice test and practical test represents 75% from the final mark. The multiple choice test and practical test will be held in a course room. • The final mark will be computed if the marks from the multiple choice test and the practical tests are equal or greater than 5 and will be rounded according RODPI of UPT.	• The marks equal or greater than 5 for the exam and for the laboratory activity will be recognized unconditionally at any moment.
5	III	Information Theory and Coding	• Written exam. • Two internal examiners. • A theoretical subject (20 mcqs) and 2 to 4 problems. Duration: 2,5h. Weight of activity mark in the final mark: 33%. • A passing mark of 5 is obtained for solving half of the subjects, if the activity mark is at least 5. • For the maximum mark (10), 90% of the exam subjects must be properly solved and the	• The marks equal or greater than 5 for the exam and for the laboratory activity will be recognized unconditionally at any moment.

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			activity mark must be at least 9,5. Room assigned by the executive board of the faculty. Exam subjects multiplied for each student.	
6	III	Data Communications	• Written, 2 examiners • 8 questions (4 theoretical questions and 4 exercises) • Requirements for minimum mark: the average of the marks to be at least 5 for the theoretical part and at least 5 for the practical exercises • The list with possible questions is published on the Internet, before the beginning of the exam session. All the subjects are chosen from that list.	• After each module of three laboratory works the students will have to pass a test, from the theoretical background and the practical activities related to the laboratory works • Another test has as subject exercises that represent applications of the theoretical topics discussed during the courses • The arithmetical mean of the three marks will constitute the basis of the student progress evaluation during the semester
7	III	High Frequency Techniques	• Colocvium (two tests) • No. of examiners: 2 • No. of questions: 6= 4 theory + 2 problems per test • Requirement for minimum mark: at most two theory questions left untackled • Written examination of 1h and 15 minutes / test; 50% examination and 50% activity in the final grade	• Two laboratory tests • One homework (microstrip amplifier design) • Continuous assesment • 50% in the final student's grade.
8	III	Practical Training	• According to Practice Regulation	•
9	III	Electromagnetic Compatibility	• Written exam. • Two internal examiners. • 10 subjects (8-9 theoretical and 1-2 problems). Duration: 2,5h. Weight of activity mark in the final mark: 40%. • A passing mark of 5 is obtained for solving half of the subjects, if the activity mark is at least 5. • For the maximum mark (10), 95% of the exam subjects must be properly solved and the activity mark must be at least 9,5. • Room assigned by the executive board of the faculty. • Exam subjects multiplied for each student.	• Marks of at least 5 (both for the exam and for the activity) are recognized unconditionally at any moment.
10	III	Digital Switching Systems	• Written exam. • Two internal examiners. • 10 subjects (8-9 theoretical and 1-2 problems). Duration: 2,5h. Weight of activity mark in the final mark: 40%. • A passing mark of 5 is obtained for solving half of the subjects, if the activity mark is at least 5. • For the maximum mark (10), 95% of the exam subjects must be properly solved and the activity mark must be at least 9,5.	• Marks of at least 5 (both for the exam and for the activity) are recognized unconditionally at any moment.

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			• Room assigned by the executive board of the faculty. • Exam subjects multiplied for each student.	
11	III	Programmable Logic Systems	• Colocvium, 2-3 examiners, 10 questions, 50% done to pass, over 92% for 10, 2 written papers	• 10% bonus according to homerworks • 10% bonus accordig to innovative solutions
12	III	Power Electronics	• Written examination • Two examiners • 30 short theoretical questions and 2 problems • Each question is evaluated by 1/3 points. Therefore the mark for evaluating the theoretical aspects equals the number of correct answers divided by 3. Each problem is evaluated on a scale from 1 to 10. The mark for the applications skills is the average of the two problems individual marks. The exam mark is the average between the mark evaluating the theoretical aspects and the mark for the applications skills. • Requirements for minimum mark: minimum 13 correct answers from 30 and at least a mark of 5 for each problem. • Requirements for maximum mark: 28 correct answers from 30 and at the average mark for the two problems to be at least 9.5. • Exam room previously established by dean's office staff. The exam lasts for 3 hours with a 10 minutes break after the first 50 minutes.	• En route evaluation consists of 3 marks, each mark being obtained as a result of knowledge evaluation from the previous three laboratory meetings. • Laboratory weight is one third in the final mark, while the exam mark weight is two thirds. • The acquired laboratory work is approved in the next academic year.
13	III	Embedded Systems	• Written Evaluation • Examination assisted by at least two instructors • 6 theoretical subjects and 3 applications for a 3 hours working time. • Each subject has a 1 point score value. The passing score 5. • The final grade is an average mean between written evaluation (2/3) and practical class activity (1/3) marks. • Classroom assigned by the registrar	• The following results are recognized until the graduation: • Final Examination • Practical class activity
14	III	Digital Telephony	• Written examination, 2 hours and 30 minutes • 3 examiners • 6 equally weighted subjects each containing 1-2 theoretical questions and 1-2 numerical applications • Grading from 1 to 10 for each subject • The minimum mark in order to pass the examination is 5, corresponding to basic understanding of the theoretical aspects of the course and the ability of solving simple numerical applications similar to the examples presented in the course • The maximum mark requires a detailed understanding of the theoretical aspects and the ability to solve complex applications, slightly different from those presented in the course	• The course activity is graded based on a number of 7 – 8 homeworks, with grading from 1 to 10. • The laboratory activity consists of 8 practical classes each ending with a test. The tests verify the understanding of the practical aspects and the ability to interpret the practical results

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15	III	Audio and Video Systems	• Two-part written examination (usually first part in the 6th week and the second part in the 12th week), average of two examiners. • 5 questions for each examination (10 total questions). • Grading from 0 to 10, minimum mark in order to pass each examination is 5 corresponding to general understanding and knowledge of the course and the ability to calculate course-based numerical examples; for the maximum grade the requirements consist in a detailed comprehension and knowledge of the course plus the ability to compute also tricky numerical examples (designed to evaluate a sharp comprehension of the course).	• Practical activity concerning the main course topics, followed at the end of each class by a short written test (usually 10 minutes). The tests are designed to evaluate students' understanding of the practical work and of the main course topics involved. Grading from 0 to 10 for each test, minimum average required to pass the activity is 5 • Individual project due at the end of the semester. The project requirements are designed to verify the knowledge and comprehension of the practical activity of the entire semester. Grading from 0 to 10 , minimum project grade required is 5
16	III	Practical Training	• According to Practice Regulation	•
17	IV	Electronic Equipment Testing	• Written examination, 2 examiners, 6-8 theoretical questions and 1 problem; • Condition: minimum 5 for theory and problems; • Final mark calculated as: [0,6 * Nexam + 0,4 * Nactiv + 0,5]. Condition for maximum mark: from the above formula. • Evaluation conditions have been announced at the first course and sent to the students by email.	• 3-4 tests during the semester, as part of the laboratory • possibility to redo tests • possibility to redo 2-3 laboratories
18	IV	Software Development	• Colocvium, 2-3 examiners, 10 questions, 50% done to pass, over 92% for 10, 2 written papers	• 10% bonus according to homerworks • 10% bonus accordig to innovative solutions
19	IV	Modelling and Simulation	• Written exam including only applications. • Practical mathematical modeling and computer simulations which are held in a laboratory room and will be evaluated by tests and homework applications. The laboratory activity includes a project. The average mark of the tests, homework and project represents 1/3 of the final mark. • Minimum 2 examiners. • Written applications part – 5 questions. • The mark 5 means 50% correct answers for the applications, • The mark 10 means 100% correct answers for the applications.	• Permanent oral evaluation during practical activities, tests, homework and project from the topics are covered by the laboratory. • The grade 5 or higher for the written examination and for the activity during semester remains valid for any future

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			• The mark from the written exam including applications represents 2/3 of the final mark. The written exam will be held in a course room. • The final mark will be computed if the marks from the written exam and the practical tests are both equal or greater than 5 and will be rounded according RODPI of UPT.	examination.
20	IV	VHDL	• Semester activities – 3 tests distributed over the semester, written final examination, • 2 examiners, proficiency and literacy in VHDL and simulation progressas minimum requierements, exams exagiencies discussed before exam.	• Presence at classes, passing all tests during the semester.
21	IV	Digital Signal Processors	• Written exam. • Two internal examiners. • A theoretical subject (20 mcqs) and 2 to 4 problems. Duration: 2,5h. Weight of activity mark in the final mark: 33%. • A passing mark of 5 is obtained for solving half of the subjects, if the activity mark is at least 5. • For the maximum mark (10), 90% of the exam subjects must be properly solved and the activity mark must be at least 9,5. • Room assigned by the executive board of the faculty. Exam subjects multiplied for each student.	• The marks equal or greater than 5 for the exam and for the laboratory activity will be recognized unconditionally at any moment.
22	IV	Microelectronics	• 2 written examinations • 2 supervisors • 20 questions concerning theoretical knowledge (0.5 points each, maximum score is 10 points) • Final mark: the weighted average of the examination score (2/3) and the lab activity (1/3) • Minimum mark: minimum 5 for written examination and minimum 5 for lab activity • Maximum mark: the weighted average equal to or greater then 9.5 • Eval. conditions setup: - According to the RODPI of UPT	• During the lab activity, the teacher is testing the students on their knowledge of lab experiments (3 written tests and a final interview). The average of these 4 marks is the mark for lab activity.
23	IV	Integrated Digital Networks	• Written examination, 2 hours and 30 minutes • 3 examiners • 6 equally weighted subjects each containing 1-2 theoretical questions and 1-2 numerical applications • Grading from 1 to 10 for each subject • The minimum mark in order to pass the examination is 5, corresponding to basic understanding of the theoretical aspects of the course and the ability of solving simple numerical applications similar to the examples presented in the course • The maximum mark requires a detailed understanding of the theoretical aspects and the ability to solve complex applications, slightly different from those presented in the course	• The course activity is graded based on a number of 3 – 4 homeworks, with grading from 1 to 10. • The laboratory activity consists of 8 practical classes each ending with a test. The tests verify the understanding of the practical aspects and the ability to interpret the practical results

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24	IV	VHDL - Project	• Semester activities – one presentation of project progress during the semester, final project presentation in place of final examination, • proficiency in VHDL modeling, simulation proficiencies as minimum requierements, project implementation in FPGA is necessary for maximum mark, objectives and exagiencies discussed at the beginning of the semester.	• Project progress asssed constantly during the two periods in between results presentations.
25	IV	Digital Signal Processors - Project	• Semester activities – one presentation of project progress during the semester, final project presentation in place of final examination, • Maximum mark obtained if the final goal is attained.	• Project progress asssed constantly during the two periods in between results presentations.
26	IV	Digital Radio Communications	• 2 Written examination, 1 hours and 15 minutes each • 3 examiners • 6 equally weighted subjects 2-3 theoretical questions and 3-4 numerical applications • Grading from 1 to 10 for each subject • The minimum mark in order to pass the examination is 5, corresponding to basic understanding of the theoretical aspects of the course and the ability of solving simple numerical applications similar to the examples presented in the course • The maximum mark requires a detailed understanding of the theoretical aspects and the ability to solve complex applications, slightly different from those presented in the course • The final mark is a weighted average between written examination (60%) and the activity during the semester (40%).	• The course activity is graded based on a number of 3 – 4 homeworks, with grading from 1 to 10. • The laboratory activity consists of 4 practical classes each ending with a test (tests verify the understanding of the practical aspects and the ability to interpret the practical results) and other 4 classes in which students must build a radio receiver, and measure the main characteristics. This part require a short report in order to explain how radio receiver work and how they measure the characteristics.
27	IV	Optical Communications	• Written examination, theoretical subjects and problems, minimum mark is given for at least 50% of the maximum rating, maximum mark for at least 95% of it, if lab activity is passed.	• Permanent oral evaluation during practical activities and multiple choice final test from the topics coverd by the labs.
28	IV	Image Processing	• Written examination, theoretical subjects and problems, minimum mark is given for at least 50% of the maximum rating, maximum mark for at least 95% of it, if lab activity is passed.	• Student activity during semester is mainly evaluated at lab works and accounts for 40% of the final mark.
29	IV	Biomedical Electronics	• Written examination • Two internal supervisors; • 4 theoretical subjects, 2.25 points for each subject + 1 point from the start • 2 applications, 4.5 points for each subject + 1 point from the start • The finale grade is calculated as sum of 2/3 of the grade for the exam and 1/3 of the grade for the activity during the semester • It is necessary to pass (grade 5 at least) both written examination and activity during the semester to qualify for a course average calculation • The written examination is held in an adequate classroom decided by the faculty's	• Permanent oral evaluation during practical activities and multiple choice final test from the topics coverd by the labs. • The grade 5 or higher for the written examination and for the activity during semester remains valid for any next examination.

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			executive board	
30	IV	Electronic Packaging	• Written examination with 2 examiners and minimum 20 questions • The examination will check the general knowledge acquired in the field of electronic packaging through a large number of questions with short answers. • The students will also be asked one or two questions requiring detailed answers, either synthesis or focused on a specific topic. • The requirement for minimum mark is to answer 70% of the short questions. The requirement for maximum mark is to answer all the questions	• The students are required to participate, during the semester, at minimum 50% of the course and 90% of the laboratory classes. • Each laboratory work will be graded by the teacher based on a short test at the end of the class, covering the topics discussed during the session • During the semester the students will be asked to complete and present a project that will be graded at the end of the semester.
31	IV	Wireless Communications	• Written examination in one session, with 2 examiners. • 10-12 questions, including 7-8 for theoretical knowledge, and 2-3 problems. • Final mark : 2/3*(1/3 theoretical knowledge + 2/3 problems solving)+ 1/3 seminar activity • Mark 5 : minimum 5 at theoretical knowledge, minimum 5 at problems solving and minimum 5 at seminar activity • Mark 10 : arithmetical mean greater than 9.5. • Provided by the faculty.	• The grade for the activity during the semester represents the simple average of the laboratory grade. The laboratory grade reflects the practical skills of the student, and the results obtained by short tests. • The grade 5 or higher for the written exam or for the activity during the semester, remains valid for any next examination.
32	IV	Software Project	• Progress grades during the semester; final demo and evaluation	• 10% bonus accordig to innovative solutions