

# Principles of enquadradores to the restructuring of the courses of the 1 st and 2 nd cycle of the Higher Technical Institute 2 1 2

The 2 0 -May- 2 0 1 9

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## FOREWORD

document sets out the general framework for the restructuring of the This courses leading to the degree of the 1 st and 2 nd cycle of the Higher Technical 2018, with Institute (IST). It is the result of a process that began in January of the approval of the terms of reference and constitution of the Committee on the Teaching and Practices of Teaching the IST (CAMEPP), Analysis of the in which 2 0 1 9, with the was completed in March submission of the President of STI, the Chairman of the Scientific advisory Board (AB), and the Chairman of the (PC), final report (referred to teaching committee here as the Report of the CAMEPP CAMEPP) and the letter of the answer in the the contributions submitted by the community. Afterwards, the bodies of the STI, the Chairman, Managing (MC), CC, and CP, the Board of the department committee and struts (CDET), have examined the final paper, taking the discussion in the corresponding as the result's a extra set of recommendations, which are also reflected. organs, conditions of the frontier This document is intended to define and categorize the across all of the courses in the the context of to deploy 1 st and 2 nd cycle in establishing the principles that are fundamental to be considered in the design of up the set the schedule for this deployment, and set main courses, up steps and tools for the transition to the new structure of the course. This document is not intended to be all-inclusive with regard to a set of measures to develop reflection of the CAMEPP, and as a result of the of the recommendations of this solely on the Report, the focus is components for which they are related to the to the restructuring of the courses the 1 st and 2 nd cycles, design and of in order work as well as the work the committees, cross-cutting, which is associated to of 2 nd cycle can with the courses of the 1 st and be initiated. The document is organized into seven sections.

- 1. General principles;
- 2. The general organization of the courses of the 2 nd cycle;
- 3. The general organization of the courses of the 1 st cycle;
- 4. The overall principles for the organization of the calendar year, the structure of the credits to course units and their operation;
- 5. A transition plan;
- 6. The documents, validity, and timeframe;
- 7. Commissions An Ad-Hoc Basis.

## 1. GENERAL PRINCIPLES

The Report of the CAMEPP has identified a number of best practices in a set of expanded leading universities, which were considered relevant to the teaching in the STI:

- . The formation of a solid foundation in the Sciences and Engineering;
- The Project Is Blasachin@n Research-Based Learning, Problem-Based Learning, The Client-Based Learning, (Hands-on);
- The flexibility in the academic courses;
- Humanistic component;
- These competencies are integrated into the course units (CU);
- · Integration projects are multidisciplinary;
- . The academic year is organized in order to promote a greater focus on, and work is ca
- Internationalization.
- Training on entrepreneurship and innovation, Business & Academia;
- Good teaching, scholarship, and experiences for the community as an academic;
- . The diversity of qualifications,
- The course of general Science in Engineering, 1.No cycle is taught in the English language.

The analysis of the country context and the position of the STI, which resulted in a set of measures in relation to the structure of the curriculum, organization, philosophy, and practices of teaching are presented in a generic form, and they are discussed in detail and operationalised by the Report of the CAMEPP, and is here reproduced *verbatim*<sup>1</sup> :

- The end of the integrated master's programmes, and the adoption of the model 3 a + 2, a);
- Changes to the UC-6, and 3 units in the european System of transfer and accumulation of credits (ECTS) in all of the School;
- The introduction of the model for the calendar year in the 2 time periods, for the first six months,
- . The increase in co-ordinating the training of the base of the specialty;

It is just the ones that are not directly related to the restructuring of the courses of the 1 st and 2 nd grade that are relevant to the design of the course. These measures have been supplemented by other member states who are not the subject of this paper.

- The increase in overall flexibility of the curriculum;
- The creation of the *minors* be consistent in the level 2 .No cycle;
- · Recognition of curricular and extra-curricular activities;
- The introduction of the university "Project, Integrating the 1-cycle (PIC 1) and 1 2 CREDITS for a follow-up study at 1.No cycle;
- The widening of the scope of the project by the end of the 2.No cycle;
- Creation or Strengthening of a Design/CU-in co-ordination with the business units of the investigation;
- Autonomy and corresponsabilização of the students.
- Paradigm shift in education.
- · Enhancement/overhaul of the training of the trial;
- Of training at the *soft skills*;

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- · The strengthening of skills in computer science and programming
- Education in the Humanities, Arts, and Social Sciences (HASS);
- The elimination of the running applications, in the first half and alternative system of precedence.

It has received widespread support in the consultation carried out the bodies, in the context reservations and concerns with specific regard to some of the points in the conceptual model, which has been the subject of further discussion. In the subsequent reflection has addressed this concern, the present paper sets out the general principles for the reorganization of the courses of the and **2** nd which 1 st cycles, results in this work and the subsequent discussion, with a focus on the global aspects of the courses, and the conditions in border operations. The Report of the CAMEPP sets forth а principles and actions significantly wider than those that set of that will are out of the implementation of which will support the restructuring of scope of this document, the the organ of the courses of 1 st and 2 nd stage of the sexually transmitted infections. the 2 nd of STI The restructuring of the courses of the 1 st and cycles should you address all the aspects focused in this paper and, simultaneously, to encourage deep thought reflection about the of the and 2 nd cycles of the STI and courses 1 st will be quided principles and measures identified in the Report of the CAMEPP. by the

## 2. The GENERAL ORGANIZATION OF the COURSES OF the 2 nd CYCLE

In order to clarify the organization of the courses of the 2 nd stage of the study include the following principles in the development of the management. curriculum, the world of the The structure of the 2 nd cycle courses should organized following way<sup>2</sup> be in the

- The main area for a minimum of 6 0 ECTS credits)
- Free options (18-30 (ECTS) are offered on the 2nd and 3rd semester
- Extra-Curricular activities (3 to 6 CREDITS), is generally credited in the 2 nd and/or 3 rd year. including the free options)
- Thesis (3 0 ECTS) are offered in both semesters.

The total amount of the loan is 1 2 0 ECTS credits.

The other sections of this document is the detailed aspects of the timing of the courses, the types of the CU, and the number of hours of contact with the protected area. Set out now for a couple of things that are related to the minimum of 60 ECTS groups described above. The main area for a credits)

CU binding, UV options and/or a Draft of The main area may include the the Thesis, with a maximum of 1 2 CREDITS which could take one of the following configurations: it can shaped in a protected area of the Thesis, be the two CU or a CU of a Project, a Thesis (6 CREDITS), and a CU. There are no restrictions the organization of a set of ECTS credits, as to completed with the limits set out the structure and organization of the university in the 2 nd cycle section 4). (see The options 1 8 to 30 ECTS credits) are Free (from

Is it possible to obtain the following forms of personal development:

- 1. Completely free in the context of a training plan (*career* the *plaensing*)al discussed by student with to tutor/co-ordination;
- 2. Expertise in the area of training, the master

3. A minor coherent set of 1.8 CREDITS in the area of education

and a multi-disciplinary approach, which can be either intra or inter-agency. These *minors*offered to all the students of the 2 nd cycle, the context does not make it a part of the curriculum of the courses, but they can also be combined with

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<sup>&</sup>lt;sup>2</sup> They are used as designations, the 1 st semester, 2 nd semester, 3 rd semester, 4 th semester, to include the four semesters of courses in the 2 nd grade

deals are already in place (CU, and the courses of the 2 nd cycle). On the set of the to be made available for all the students of the 2 nd cycle of the STI-is defined by the committee appointed for this purpose (see section 7). The Free Options can be selected from any of the UC's in 2 nd grade. Extra-Curricular activities - free (3-6 CREDITS)

This field is intended for the accumulation of 3 to 6 CREDITS for the recognition extra-curricular activities. The set of activities of curricular and that are to be with their creation of the UC Portfolio name the credited equivalent of one whose the course be determined by the coordinator, location on will shall be the a committee subject of setting, by appointed for that purpose (see section 7). Typically, it will include the works of a scientific nature/introduction to the research project between semesters, on-site training courses, short-term ex., OWNED, BEST, MOOCS, Technical, schools, summer activities, associations, or to work on their own initiative. The possibility of the accumulation of this free choice has to be made explicit in the definition of the curriculum of the course.

End of the 2 nd cycle of the Project of a Dissertation + Thesis

То complete the set of 42 CREDITS provided for in these fields, the student will be able to choose one of the following options to the university of the Module:

1. Thesis In Science;

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- 2. The project Company;
- 3. Type of design Capstone.

1 2 ECTS credits, corresponding to the Thesis may take one of the following configurations: they can be shaped in a protected area of the Project, in two CU or a CU of a Project, a Thesis (6 CREDITS), a CU. Theory, and the co-ordination of the course is to propose lt is up to the name(s) type(s) well as the format and the context(s) of the course unit(s) type(s), as in support of the thesis/ dissertation. The joint Project by the End of the 2 nd cycle (P Dissertation + Thesis) will be offered in both semesters, in order to de ensure discontinuation of the activities of the that it does not occur, students UC in a Dissertation, and will be offered in default of payment. Just both semesters, of the curriculum of the in the case course and does not include а Thesis. With the completion of the Project report should be sent prior to the lecture.

## 3. The GENERAL ORGANIZATION OF the 1 st CYCLE programmes

In order to clarify the organization of the courses of the 1 st stage of the study include the following principles in the development of the management. course of the The curriculum of the 1 st cycle, you should understand the following curriculum:

- 1. Mathematics (3 0 CREDITS);
- 2. Physics (1 2 ECTS credits);
- 3. Math/Physics/Chemistry/Biology (12 ECTS credits);
- 4. Software engineering (6 ECTS);
- 5. HAAS's work (9 ECTS) = 3 CREDITS the Economy/Management, a + 6 ECTS credits);
- 6. The main (87-105 (ECTS);
- 7. Pre-Majors (0-12 CREDITS);
- 8. The project integrated the 1 st cycle, PIC 1 (from 6 to 1 2 ECTS credits).

The total amount of the loan is 1 8 0 ECTS).

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The other sections of this document is the detailed aspects of the types of the CU, and the the timing of the courses, number of hours of contact with the protected area. In the wake of this section is to indicate some of the issues relating to the groups described above. *Mathematics* (from 3 0 to 4 2 CREDITS)

The coordinator of the course in conjunction with the Department of Mathematics (DM) should be set to the UC to include a minimum of 3 0 CREDITS CREDITS. The UC will be of and maximum of 42 6 ECTS credits, а and 1 4 -week, able to work in 7 -week or but in keeping with the rules laid down be for the general model of the organization of the terms, and in accordance established for each course in the with the requirements co-ordination The agreement for the establishment of the coordinators of the course. the DM should also be into account of the courses, and taken for the grouping of courses for the teaching. **Physics** 1 2 of the 24 CREDITS)

The of the course in conjunction with the Departamento de Física coordinator the UC to include a minimum of 12 CREDITS and (DF) should be set to а maximum 24 CREDITS. The UC will be of 6 ECTS credits, and be able of to week 1 4 -week, but in keeping with the rules laid down for work 7 the in or

general model for the organization of the semester, in accordance а with the requirements established for each course in the co-ordination of the course. The agreement for the establishment of the coordinators the DF should be taken of the courses, and into account for the grouping of courses for the teaching. In ECTS credits) the 0 to 12

The coordinator of the course in conjunction with the Department of shall be defined by the person(s) Chemical Engineering (DEQ) UNIT(s), CREDITS and maximum of 0 12 ECTS credits. to include а minimum of The UC 6 CREDITS and will be able to have will be able to work in 7 -week or 1 4 -week, but in keeping with the rules laid down for the general model of the organization of the terms, and in accordance with the requirements established for each course in the co-ordination of this course. The agreement for the establishment of the coordinators of the the middle east; they shall also be taken into account for courses, and the grouping of courses for the teaching. Of biology (0 12 ECTS credits) to

The coordinator of the course in conjunction with the Department of Bioengineering (DBE) should be set(s) of the course unit(s), to include а minimum of 0 CREDITS ECTS credits. The UC will be able to of 1 2 6 CREDITS an and maximum have will be able work in 7 -week or 1 4 -week, but in keeping with to the rules in accordance down for the general model of the organization of the periods, laid with the requirements established for each course in the co-ordination. The the establishment of the coordinators of the courses, the DBE agreement for must also be taken into account for the grouping of courses for the teaching.

The departments are responsible for the training and requirements (such as DM/DF/DEQ/DBE) , one can choose to prepare and deliver proposals, applications, cross-agency that is best suited to the courses for the general public. *Computing a minimum of 6 ECTS credits*)

ECTS credits, corresponding to The minimum number of credits in a group of 6 the existence of a protected area of Computing and Programming. In addition tothe thisoordinator of the course are to promote the integration of fields of computer science the and pr 1.5 UC in the 1 st cycle, ensuring a stress to minimum of CREDITS at а (and the weight of the evaluation of 25 %) in the first half. This measure is exp whole of the 1 st cycle of at least 6 ECTS credits (to along the run up to 6 the Program). of The coordinator of the course, you can choose to include in the curricula of these facilities ECT unit with 6 in an aggregate form (e,g, а course A committee appointed for that purpose (see section 7) to co-ordinate, credits). propose to the competent authorities, and, subsequently, to pre-approve to the provision of this component of training in all the courses of the 1 st cycle.

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#### HASS - Humanities, Arts, and Social Sciences (9 CREDITS)

the credits be achieved 1 -cycle including 3 CREDITS related All to at the to а of Economic Management, responsibility of the Department protected area and is the 6 ECTS credits of free choice in the CITIZENS. Engineering and Management, The of reception can be found on the UC that are relevant that are offered by the University of lisbon, Lisbon, and sexually transmitted infections. The contents of the 3 ECTS of the POSITION, Economics, Management and it should be made clear by taking into account the nature of the for-mation of the university of coimbra. A committee appointed for that purpose (see section 7) identify and set up on the offer of CITIZENS, including indicative list of training courses at the University an of Lisbon and in the CONTEXT guaranteed, however, that the training is relevant to are not а credited in by the course particular course can be coordinator. several different configurations/options They are considered to be for the credits for the CU-free (6 CREDITS achievement of the 6 a semester, or 2 CU 3 CREDITS each), to be determined by the co-ordination of the course, taking into account the work done by the committee appointed for that purpose. The Main

UC-specific, of course, includes the The main area but it should skills as computing also include the cross-cutting part of the UC-specific skills, which UC course. and the are not included in the Computing and Programming required). UC who are in this group, it may take 9 ECTS credits (multiples З, 6, or 12 of 3 in order to ensure the compatibility in between the courses/options), they will but need to with the rules laid down for the general model of the comply organization of the year. Pre-Majors (0 12 to ECTS credits)

The UC pre-major they correspond to a maximum of 1 2 CREDITS in the course chosen by the student from a set of applications areas of the defined by the co-ordination that are of the course. These UC's are expected to be offered in the 3 rd year, preferably in the 6 th semester of the The project integrated the 1 *st* the PIC 1 (6-12 CREDITS) year. to

integration involves the work, preferably in a This is a UC team and can and challenges of the real (i)) in the project Capstone (inclue be based on the issues 3 CREDITS in Management, Innovation /Entrepreneurship, (ii) the work in the Unit Investigation, (iii) or work in a business environment. If there of are anv in which it is not possible to ensure that all students situations are participating in the UC integrated that you lose yourself in one of the three aspects mentioned above, it is up to the coordinators of the courses are set the form up in a credit equivalencies in terms of the law.

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In any case, there should be follow-up by a professor at the instituto superior técnico. The project integrator will tend to be done the 6 th period, with the implementation is possible in the 5 th semester on the year. A committee appointed for that purpose (see section 7) will of a set of guidelines in order to support the work of the coordinators of provide the course. It is important to note that, in the case of the supply of training in the field of the Architecture, and the implementation of the measures proposed in the model of the Technical 2 1 2 2 you'll have to meet a variety of specific features in this area " (p.ex. the university of the design). In the same way, you should take into account the specificities of the courses, which allow for a contribution to a very significant amount of the other schools , or have imposed restrictions on the exercise of the profession (e.g., by the law or by professional associations).

4. THE OVERALL PRINCIPLES FOR THE ORGANIZATION OF THE CALENDAR OF THE SCHOOL, THE STRUCTURE OF THE LOAN, AND THE UNITS OF THE CURRICULUM, AND HOW IT WORKS Academic calendar The academic calendar is organised at the undergraduate level. Currently, the organization is likely to be limited to one semester, this is:

Figure 1: Organization of the one-half of the year (now), where each rectangle represents a-week green week activities, education, oranges weeks of half-time/in preparation for the exams, and the red-weeks exam)

In order to ensure that: (i) if it holds for the week welcome to the new students, the students will have the opportunity to, at the end of the school year, attending training courses at the end of June, beginning of July, and (iii) for the calendar year that is compatible with the mobility of the majority of international schools, the organization is likely to be limited to a six-month period in the model is <sup>3</sup>

Figure 2: the Organization is likely to be limited in the new model, with each rectangle representing a week at the green week activities, education, and blue-weeks of the study of/training/discussion on projects, activities, orange week in preparation for the second season, and the red week of exams, the end of the APPLICATION.

In the new model, it is important to note that:

sessions are held exclusively on the weeks indicated in green (14 • weeks of the semester, as is the case at present); in the weeks that are identified in blue, can be carried out presentations and discussions/ •

oral evidence/ assessment of the project work (but only in respect of the CU-type To see the definition, below), and a session of questions to the UC for the type A and type B), but they can't carry out the test or

 tests end of this calendar template takes two weeks for the hours in each semester, with respect to the model proposed in the Report of the CAMEPP, substituted up to two weeks of activities and teaching (at any time of the contact), highlighted in green. This setting allows you to maintain the minimum ratio that is identified in the Report of the CAMEPP of hours of self-directed work-hours contact information.

Type of CU

Each semester, the UC can be of two types:

 The CU-type: Run in the 7-week (3 CREDITS, 6 ECTS 9 ECTS 1 2 ECTS credits);

• UC-B: Run in the 1 4 weeks (6 ECTS 9 ECTS 1 2 ECTS credits).

Shall be subject to the following restrictions are placed on the design of the courses - :

The courses of the 1 st cycle and 2 nd cycle

The maximum number of CU-in, parallel = 4

The number of full unit per year (A+B) = 6

The maximum number of UC-B for the semester = 2

This design allows for the co-existence of CU, which operate to (i) the course of **1** 4 weeks, allowing for a longer teaching, or (ii) for periods of **7** + **1** a week, more focused, ensuring that it is greatly reduced the scatter of the students, a large number of CU in the place at the same time, by means of a sketch, these constraints enable the following settings on each of the first half **5**.6

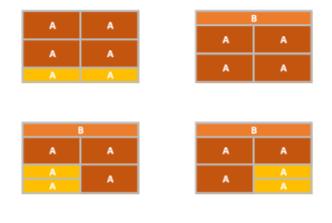




Figure 3 : possible Combinations, applications, type A and type B in the courses of the 1 st and 2 nd cycles (red: CU type 3 CREDITS; brown: CU type with 6 ECTS credits)

The scale and ECTS the number of hours of student work, broken down into the following components:

- 1. Hours of formal contact = classes, including the classes of questions;
- 2. Independent work of the student;

overall structure of the courses of the 1 st and 2 nd cycles

The design of the courses and the choice of the UNIT (A type A or type B), it is the responsibility of the coordinators of the courses, in conjunction with the rest of the courses, which make use of the offer is identical to, and in close co-ordination with all departments and be responsible for the offer. <sup>5</sup> Include only those combinations involving the CU in the **3**-and **6** ECTS credits .

The possibilities represented here do not overlap with the conditions for the previously established for the

3. Review.

. Thus, the CU 6 (3) CREDITS In they correspond to 1 6 8 mm (8 4 in) and the work of the student, to be distributed for components listed above.

In the lessons, and hours of formal contact at each of the UC can be of four types:

- 1. The Theoretical (T)
- 2. Theory and Practice (TP)
- 3. The Laboratory (L -)
- 4. Practical (P)
- 5. The Design (D)

The number of hours of contact, and the distribution of the different types of classes, it is the responsibility of the department to be responsible for the offer keeping in mind the objectives and content of the university, the teaching methods used, and the resources available to you.

In terms of the hours of the contact, shall be subject to the following two conditions 1 *st* 1 *st* and 2 *nd* years:

- UC FOR 6 ECTS credits) 1. The maximum number of hours of contact per semester = 56 The maximum number of classes of the theoretical (T) and, for half = 42 (UC- 6 Е the first 2. maximum number of hours of contact, UC per semester = 2 8 and APPLICATION 3 CREDITS) 3. The 4. The of classes of the theoretical (T) and, for the first half = 2 1 (UC-3 CREDITS) maximum number shall be subject to the following two 1 st In terms of the hours of the contact, conditions vear:
  - 1. The maximum number of hours of contact per semester = 4 9 (UC- 6 ECTS credits)
  - 2. The maximum number of classes of the theoretical (T) for the semester = 2 8 UC FOR 6 ECTS cre
  - 3. The maximum number of hours of contact, the UC for the first half = 2 4, 5 APPLICATION OF 3 EC
  - 4. The maximum number of classes of the theoretical (T) for the semester = 1 4 APPLICATION OF 3 EC

The teaching of the lectures will be organized in units of 1 hour.

<sup>&</sup>lt;sup>7</sup> Although it is recognized that the stress of the work are currently requested in the modules are not properly calibrated to the corresponding amount of CREDITS, you choose to retain the reference to the CONTEXT, in line with the standards of care that are associated with the STI \*

This amounts to a total of 8 4 0 hours, distributed across the 1 8 week semester i.e. in approximately an average of

<sup>4 7</sup> hours of work per week

It is up to the coordinator of this course, working closely with all the departments that are responsible for the supply, make sure that they are verified to be broadly in each cycle, and each year for the following standards:

- 1. Average amount of hours in a contact surface for the six-month period in 2 nd cy ECTS credits) = 2 1 02 4 5 -hour -
- <sup>2</sup> Average amount of hours in a contact surface for the six-month period in 1 st cyc 1 st and 2 nd years (3 0 ECTS credits) = 280 hours
- 3 Average amount of hours in a contact surface for the six-month period in 1 st cyc ECTS credits) = 245hours
- 4. Average amount of hours on the touch weekly in the **2** *nd cycle* = 15 - 17,5
- 5 Average amount of hours on the touch weekly in the 1 st cycle =20 years old) and a 17.5-hour (3-year) hours (at 1 and 2

All of the UC's will be explicit in its sole discretion, in addition to the information that 's currently included with the pre-requisites to the frequency of the university of coimbra 1 2 and the distribution of weekly working hours of the students, in accordance with а format that is showing , clearly, the number of hours worked on a weekly stand-alone of the students during the academic term 1.3

- <sup>1</sup> This is the value of the hours-of-contact, medium-sized for a 3 0 ECTS/semester corresponds to the 5 9 5 6 3 0 hours of independent work of the student, to be developed over an 1 8 -week (approximately 3 3 to 3 5 hours of independent work on average).
  <sup>1</sup> This is the value of the hours-of-contact, medium-sized for a 3 0 ECTS/semester corresponds to 5 6 0 hours of independent work of the student to be developed over an 1 8 -week (approximately 3 1 hours of independent work on average).
  <sup>1</sup> This is the value of the hours-of-contact, medium-sized for a 3 0 ECTS/semester
  <sup>1</sup> This is the value of the hours-of-contact, medium-sized for a 3 0 ECTS/semester
  <sup>1</sup> This is the value of the hours-of-contact, medium-sized for a 3 0 ECTS/semester
  <sup>1</sup> This is the value of the hours of independent work of the student, developed
  <sup>1</sup> This is the value of the hours-of-contact, medium-sized for a 3 0 ECTS/semester
  <sup>1</sup> This is the value of the hours of independent work of the student, developing in the course of 1 8 weeks, about 3 3 hours of independent work on average).
  <sup>1</sup> Pre-requisites defined in the UC students must have attended and passed. In the scene in which they take the precedence is in consultation with the professor of the university of coinbra if you are in a position.

it is up to the student to decide, in consultation with the professor of the university of coimbra, if you are in a position to attend the university of 1 3 of A possible format is TipoUC - Full CREDITS - It - TPj - Lk - Lg - Mic - In, or TipoUC - Full CREDITS - - - i - (j+k+l+m) (- n), TipoUC - Full CREDITS- (i +j+k+l+m) (- n) or (i,j,k,l,m,n, represents the average amount of weekly classes of type T, TP, L, P, P, P, and the number of hours of independent work on a weekly, during the academic term (A), respectively.

## 5. TRANSITION PLAN

transition to the curriculum, must The plans for the comply with the following fundamental principle: ensure that the accumulation of all of the CREDITS achieved by students in the study of the original. You will the be appointed which will begin working group, its work in May of 2019, so set up the model а submit for of the transition plan to a response, and to define the politics of distribution and compensation of the CREDITS between the plans in the classroom. This the task force is to includes teachers of STI experts in algorithms, the Vice-President (VP) of the terms and conditions, the members of the executive committee of the CC, CP, and representatives of the Academic director, and the DIRECTOR, and coordinator the course that are involved in the restructuring/transitions recent success, with of the the in collaboration with goal of designing, testing, and automation, working the coordinator, and the process of the transition of all students of the IST for the new course. For each table of equivalences, course that is to be drawn up in a where it will be reflected in th correlation between the CU source, and the university of the target, as well as the rules of the transition indicated by will the task force is toand it allow for the automatic transition the student from the course of the plan, the number of the destination. This chart should include, inter alia, all of the UC's are listed on the South, the to curriculum for all students in the course, and match each of these curriculum (UC-to-UC, global), as well applications, the new or as any other rules which the ex-ante evaluation the the task force is specifically will be set to created for that take account, elimination These rules shall into inter alia, the of the UC, the of ECTS combination of hu, the change in the number credits for the CU, and gears, autor in compensatio

and distribution defined and approved by the coc, the transitions of students as enrolled in the university of more than one cycle, the rules for the determination of the basis of the cycle the weight of the CU in the source, average and etc.

be considered if accompanied by proposal restructuring will only А for the corresponding transition plan, and the corresponding table of а equivalences in the strict respect for the model is defined by the task force is to

### 6. THE DOCUMENTS, VALIDATION, AND CALENDAR.

## Documents to submit

The documentation for the review of each of the courses includes the following documents (see the calendar):

- <sup>1</sup> The overall structure of the programmes, in accordance with the model to provide for the validation of the model, the generic set, and the elements that allow for different commissions such as the cross-cutting effect on the validation of the overall program;
- <sup>2</sup> The Curriculum, according to the model of the supply, for consideration by the bodies of the IST and ULisboa, to be submitted to the proof of A 3 ES, and was officially made available to the students.
- 3. Planning for the transition, in agreement with a model of the supply.

# The pre-validation of the proposals by the commission and cross bodies for the STI

The commissions of the cross-cutting effect of the pre-validation of the proposals on the basis of the Overall Structure of the programmes, in accordance with the terms of reference and the results of the work carried out by this committee and approved by the competent authorities of the instituto superior técnico.

To *the task force is to* on the background of the transition, you will make the analysis and validation of the plans for the transition of the course.

A joint committee of the GC, CC, and CP will perform the assessment and validation of the curriculum of the course.

Schedule

The dates in this calendar are established in the decision-making *the go/no-go*. It's here, the critical points of the calendar

In mid-October, 2 0 1 9 - submission of the Overall Structure of the study programme;

*In mid-November*, **2 0 1 9** - submission of the transition plan, and the plans of the curriculum; *December* **2 0 1 9** - passing organs to the relevant CC, CP, CG Board high School.

## 7. THE CONSTITUTION AND TERMS OF REFERENCE OF THE COMMITTEES ON **AN AD-HOC BASIS**

There is a set of cross cutting issues that need to be defined in such a way built, will be built on the following Committees *An Ad-Hoc Basis* (ad hoc committees for the joint of the CC, and CP) and the terms of reference that are associated with it:

- 1. Minors multi-disciplinary/cross-level- 2 .No cycle
- 2. Computer science and Programming
- 3. Innovation and Entrepreneurship
- 4. Extra-Curricular Activities
- 5. The project integrated the 1 st cycle (PIC 1)/Project-Capstone 2 nd grade
- 6. Cross-Cutting Competencies
- 7. Education in the Humanities, Arts, and Social Sciences (HASS)

committees on **An Ad-Hoc Basis** they will serve as the basis The purpose of the for the decisions of the board of directors relevant to the school on the subjects from each of the committees. In those cases in which the committees will address scientific skills that are associated with one or more Departments, coordination of the committees is chaired by the department(s) the concerned. The commissions will be producing documents in enquadradores to the organ competent to set up the framework for the work of the coordinators of the course, in accordance with the following schedule:

In mid-May 2 0 1 9: At the beginning of the work of the committees;

June 2 0 1 9 Production of the document, guiding to the submission to the competent authorities; Beginning in July of 2 0 1 9: Approval of the organs concerned. November 2 0 1 9: The validation of the global structures of the courses are in accord with the documents enquadradores approved by the competent authorities.