

# Manifiesto FLEEI 2009



Actions to be taken as a result of the discussions held during the first Latin American forum for students on engineering education (FLEEI 2009, from its spanish initials) from June 1st to 5th, 2009.

FL/MAF/0000/A/ENG



# 1ER FORO LATINOAMERICANO DE ESTUDIANTES SOBRE EDUCACIÓN EN INGENIERÍA

## MANIFESTO: FL/MAF/0000/A/ENG

### ABOUT THE ACTIONS TO TAKE PLACE AS A RESULT OF THE DISCUSSION FORUM.

*Latin American engineering students gathered in the city of San Cristobal, Venezuela from 2 to 5 June 2009 under the framework of the first Latin American Student Forum on Engineering Education<sup>1</sup>,*

*Noting with concern* the weakness in most Latin American engineering programs when orienting the formation to satisfy practical needs (training) that involve only the implementation of solutions and not the design of projects and research to promote science conception either local or global;

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<sup>1</sup> The FLEEI acronym will stand for first Latin American Student Forum on Engineering from its spanish initials.

*Having assessed* the disciplinary referent of Latin American institutions and considering definitely necessary to be able to relate the theoretical concepts acquired with practice;

*Deeply concerned* by the lack of adequate and correctly implemented tools in the engineering programs that allow to develop the necessary skills to enter a global environment in particular the in English language communication skills;

*Considering* the inefficient means by which current situations expressed by students are remedied about their formative interests due to the lack of a correct recompilation and posterior follow-up to the ideas raised by them;

*Fully aware* of the urgent need in Latin American universities of strengthening the communication ties between them, their students, and the labor market;

*Also noting with concern* the absence in most educational institutions of little or no agreement, arrangement or effective activity that facilitate the actual placement in the labor market or the development of enterprising ideas of engineering students;

*Deeply convinced* that the profile of a Glocal<sup>2</sup> engineer should develop, besides the necessary theoretical knowledge and technical skills, the values and aptitudes such as respect, social responsibility, dynamism, ability to work in multidisciplinary teams (synergy), skills to adequately convey information and basic knowledge on the economic management;

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<sup>2</sup> Term composed by the resultant union of the first syllable of the "Global" Word and the second of "Local" which refers to the development in a local manner, but with a global mission.

***Emphasizing*** the importance of extracurricular activities among students of engineering such as community work, collaboration in the development of projects between universities, participation in conferences and congresses, and monitoring for students groups within the university and cultural exchange between students;

***Recognizing*** that integration and collaboration between countries of the world as well as the mobilization of bodies responsible of developing themselves, allows the exchange of knowledge on problems and solutions that have been presented between the different environments of global community so that, in this way, with a belonging feeling be able to apply these solutions that have been raised in an universal environment in a specific locality;

***Realizing that*** even though in recent years the exchange and interaction among several Latin American universities has been promoted, It have failed to capture a large scale student body;

***Convinced*** that the commendable interest and willingness of the actual managers of the educational institutions in Latin America will always support the activities realization, among its students, which are in favor of their development as professionals;

## DECLARE THAT:

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### CHAPTER 1: ABOUT THE STUDENT ORGANIZATION

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**ART. 1.-** They decide to organize formally using the current structure of the existing student chapters of LACCEI and modify it as necessary to permit a more international and global application that fits the demands of the global environment in which it will develop.

**ART. 2. -** Encourage the creation of a general secretariat of the CE-LACCEI<sup>3</sup>, supported in the current LACCEI institutionalism, that undertake supervising and coordinating activities in the local groups of CE-LACCEI as well as serving node and gateway link between the different national networks that be developed.

**PARAGRAPH I. -** The secretariat will manage the resources and general activities of the CE-LACCEI, but will never interpose before the autonomy in the exercise of their functions in the LCG<sup>4</sup> if this is in consonance with the constitution that they have submitted in advance.

**ART. 3.-** Decide to develop a website that allow the follow up and dissemination of the activities carried out within the CE-LACCEI or in the which they can see themselves involved. Having itself as basic functions:

- a) Serve as a repository for institutional documents of the CE-LACCEI as well as any provisional rule or regulation to define

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<sup>3</sup> It will be denominated CE-LACCEI to the student chapters of LACCEI (Latinamerican and Caribbean Consortium of Engineering Institutions)

<sup>4</sup> The Local Groups will be named as LCG (Local CE-LACCEI Groups)

- a procedure performed in the internal of chapter or in any other which be involved;
- b) Hold a database with the information of the CE-LACCEI members;
  - c) Have a structure to store the memories of investigations and projects that have been developed by the CE-LACCEI;
  - d) Serve as a repository for conclusions and solutions reached in the various forums or any other student activity in which the voice of the student is collected;
  - e) Promote participation in local, regional and international events where the latinamerican engineering student can get any be benefited;
  - f) Inform all members of the CE-LACCEI about the activities in all of the LCG and scholarship programs, research competitions and other activities of interest;
  - g) Other actions assigned by fulfilling any other goal in this manifesto;

**ART. 4.-** Require the completion of at least one general assembly under the LACCEI conferences to elect the new leadership of the secretariat and assess the compliance level of the proposed objectives.

**ART. 5.-** They encourage the creation of a training committee that is responsible for transferring knowledge within the CE-LACCEI and undertake the new members training in exercising their functions within the CE-LACCEI.

**PARAGRAPH I. -** In addition to training geared to the transfer of internal knowledge of the CE-LACCEI, this committee will be in

disposition to facilitate the participation of members in training on professional matters.

**PARAGRAPH II.-** The conduct of training workshops will be limited to the availability of the coaches and other physical and financial resources for Its implementation.

**ART. 6.-** Decide to present on the end of November of this year, the latest, a set of documents that define the performance of activities and the final structure to be used in the CE-LACCEI to channel their duties.

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## CHAPTER II: ABOUT THE DEVELOPMENT AS GLOCAL ENGINEERS

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**ART. 7.-** Consider of vital importance the development of activities that involve students with the community and make them aware of their social responsibility.

**ART. 8.-** Urge the implementation of activities to enhance the cultural exchange; as is the development of collaborative research with other universities and the participation in workshops, conferences and congresses in other regions.

**PARAGRAPH I. -** In the activities of international character urge the participation of Latin-American engineering students in the Latin American Global Students Forum<sup>5</sup> to have, in such way, a better representation of the Latin-American region and the Caribbean.

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<sup>5</sup>Best known for GSF (Global Student Forum). This is a student organized event on SPEED (Student Platform for Engineering Education Development) that aims to collect feedback from all students in the world on various engineering programs.

**PARAGRAPH II.-** At the regional level, the participation in the FLEEI is equally necessary to have, in such way, a more coherent voice that can be interpolated to international forums.

**ART. 9 .-** In addition they recommend to take advantage of human resources with valuable knowledge in various areas within the engineering institutions to allow the exchange of knowledge among students through workshops and extracurricular courses that further develop their professional skills.

**ART. 10.-** Prompts to ensure proper updating of the engineering programs on which the latinamerican engineers are trained and its correct implementation.

**ART. 11 .-** Request a more effective implementation of tools that promote learning and subsequent practice of the English language.

**PARAGRAPH I.-** To channel this goal is pretended to provide an opportunity for students to develop research in collaboration with students from other English speaking colleges and to participate in events whose official language is English as is the case of the Global Student Forum (GSF).

**ART. 12 .-** In addition they resolve to create a committee that is responsible for raising funds to enable the participation of Latin-American students in international events and research projects.

**PARAGRAPH I. -** For this purpose the group of students in exercise of their duties in this committee must work together the managers of LACCEI due it will be needed, before anything, to make LACCEI known in the country in which the LCG is located as a foreign non-profit organization that works within the country, so in addition of giving a legal

personality to the CE-LACCEI in your country, donations done by the sponsors will be tax-free for them.

**PARAGRAPH II.-** In furtherance of this objective you can work with chapters nationwide and joint efforts because the register of LACCEI as a foreign non-profit organization only should be recognized by the country.

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### CHAPTER III: ABOUT THE PROJECTS AND RESEARCHES

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**ART. 13.-** They have resolved to encourage the development of projects and research among students through the implementation of competences of ideas, at a local level first, coordinated by the LCG and then the projects will be presented in ExpoLACCEI within the LACCEI conference framework to verify which are the best projects and help with funds the channeling of it.

**ART. 14.-** Encourage various academic institutions to take part in the development of global collaboration projects between students from different universities.

**PARAGRAPH I. -** It is advisable to have greater involvement in one of the best initiatives currently in progress that is "Americas by Design" developed by Dr. Ivan Esparragoza from the University of Pennsylvania in the United States. With this initiative its seek the students integration in the development of a relatively simple and general knowledge project, but applying all the guidelines required for the proper design of a product.

**ART. 15 .-** Consider of vital importance to incentive the entrepreneurial spirit of research and projects development and therefore the need of verifying what current need of business or sector of the labor market can be solved by developing a research project.

**ART. 16.-** Recognize the need to allocate the committee collected funds for the development of the highlighted research projects.

**ART. 17.-** They believe necessary that universities allow the engineering students to make use of the college owned laboratories to conduct investigations.

**PARAGRAPH I. -** The universities which have adequate technological resources in their laboratories could create the proper procedures to facilitate the development of research from other universities that do not have huge laboratories or technological resources also promoting, in this way, the student mobility and cultural exchange .

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#### CHAPTER IV: ABOUT THE LABOR MARKET.

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**ART. 18.-** They encourage dialogue between universities and the labor market to create channels of communication which allow the companies and universities to maintain a direct contact through which employers can express their needs and the university can provide professionals that fit those needs.

**ART. 19.-** They express their desire to promote programs for student internships and laboratory practices in the companies to promote the employment of students with greater ease.

**ART. 20.-** Make a call to encourage entrepreneurship among engineering students by supporting entrepreneurial ideas from the Market-University Union and the proper disposition of pertinent information.

**ART. 21.-** Decide to develop, in a section the website, a section aimed to the multinational insertion of Latinamerican engineers to the labor market. This section will have the following main features:

a) Inform the students regarding how to channel their entrepreneurial ideas;

b) Possess a database which contains the resumes of those interested in bidding for by multinational companies jobs. This database will be displayed to human resources departments of companies so they can take the students into consideration in the moment of opening a vacancy.

**ART. 22 .-** Urge universities to keep up to date regard to the requirements demanded by the local and regional labor market to keep updated with the academic programs used to train the latinamerican engineers.

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#### CHAPTER V: ABOUT THE STUDENT VOICE.

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**ART. 23.-** Consider like an important and necessary event the FLEEI in order to collect, in a formal way, the voice of students and to meet the needs they express. That is the reason why they decide to make this an annual event held in the frame of the LACCEI conference.

**ART. 24 .-** In addition they resolve to create a forum in the website in which to debate on topics of interest among students, this section will

have several rooms in which they can discuss various topics of local or international nature.

**ART. 25.-** They emphasize the importance that universities should place on evaluating adequately the feedback they receive through their students and give the proper effort to channel activities that fit the solution of the proposed problems.

**ART. 26.-** Decide to include in the structure of CE-LACCEI a tool through the which effectively respond to student concerns and recommendations.

**Given** at the First Latin American Student Forum on Education of Engineering, in San Cristobal, Venezuela, at June fifth of the year two thousand nine.