

ICSC - WORLD LABORATORY



PROYECTO: I-III LAND-5

CENTRO C.A.O.

Creación Asistida por ordenador

Director: Prof. Alain Garnier

Co-Director: Prof. Juan Manuel Borthagaray

REPORT RESEARCH

PROGRAM BRIEF

MONTHLY REPORTS

COLLAZZO BLAHO

Cristian Daniel

Becario C.A.O.

**BRIEF
IN ENGLISH**

ICSC WORLD LABORATORY

PROJECT: I-III LAND-5
C.A.O. CENTER
Creation of Computer Assisted
Desing center in Bucuos Aires

Prof. A. Garnier - Director
Prof. J.M. Borthagaray - Co-Director

COLLAZZO BLAHO
Cristian Daniel
Fellowship C.A.O.

Concerns: Research fellowship nr 2

BRIEF OF THE MASTER RESEARCH PROGRAM

- 1 INTRODUCTION
- 2 OBJETIVES
- 3 METHODOLOGY
- 4 PHASES OF THE DEVELOPMENT

1- INTRODUCTION

It is possible to observe that in the last years CAD systems have produced a revolution in desing methods including architectural desing and building construction technologies.

The computer multiplicates the possibilities of creation and research allowing to create new solutions from the point of view of quality and quantity.

Therefore it is necessary a fast and efficient adaptation of the teaching procedures into the University curricular system not only in the architectural desing area, but also in the technical subjects, in order to create a new approach for the understanding of all the possibilities of CAD systems and applicable software in the architectural teaching.

2- OBJETIVES

Taking in consideration the impact of the CAO center into the FADU structure. Analysis of the Creation of the Computer Assisted Desing insertion in the architectural career, Analysing in a detailed manner the relationship between the existent software related to the architectural career and the possibility of inserting it in each subject.

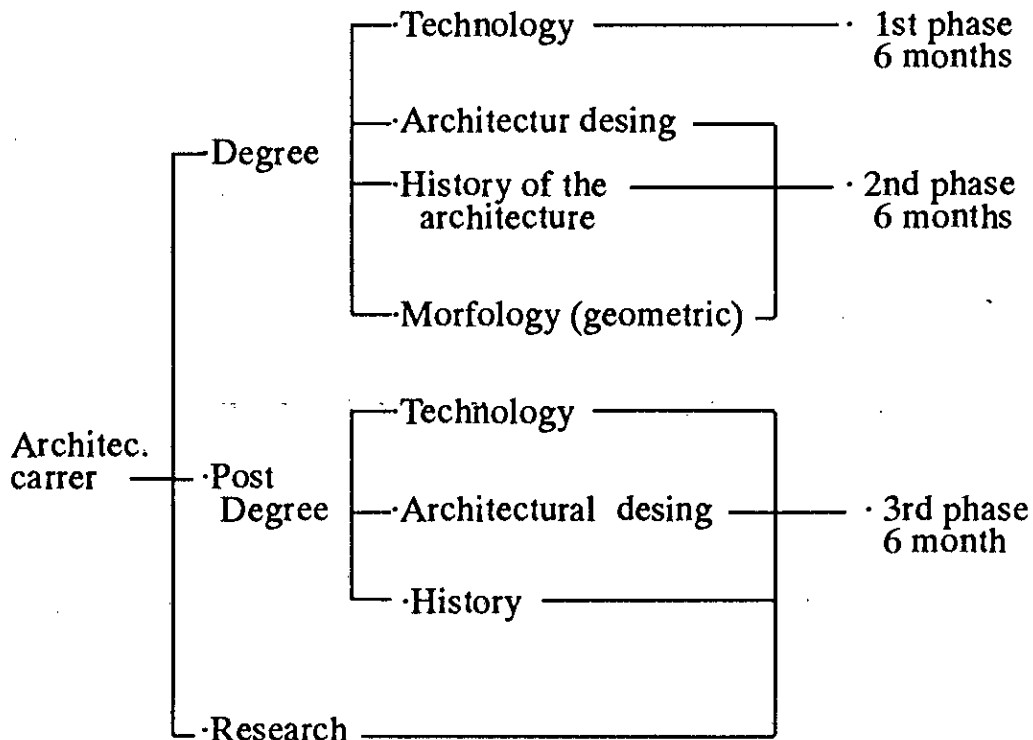
ICSC WORLD LABORATORY

3- METHODOLOGY -

- A Analysis of the subjects. Creation of data base
- B Analysis of the existing software in Argentine.
Appraisal of third parts software according the existence of information in Argentine. Applicable software catalogue
- C Interviews with the Directors of each department and professors of the FADU-UBA with the purpose of the interchange ideas about the investigation stimulating their participation in the C.A.O. center activities.
- D Determination of the different types of specific software that does not exist in Argentine, to propose as themes of research in the C.A.O. center

4- PHASES OF THE DEVELOPMENT

Curricular system structure (overall view)



ICSC WORLD LABORATORY

FIRTS PHASE - FIRST SIX MONTHS - DEVELOPMENT

In the first 6 months it is proposed here to develop these subject related to the technologicals areas of the FADU, according to the methodology that have been proposed.

SECOND PHASE - SECOND SIX MONTHS - DEVELOPMENT

In this phase I propose to develop the objetives and methodologys above mentioned adding the experience of the first phase in the following subjets :

- ARCHITECTURAL DESING
- HISTORY OF THE ARCHITECTURE
- MORFOLOGY (Geometric).

THIRD PHASE - THIRD SIX MONTHS - DEVELOPMENT

This phase is oriented to the post degree and research areas of the FADU-UBA. Following the some methodology of the anteriors phases.

Signature

ICSC WORLD LABORATORY

PROJECT: I-III LAND-5
C.A.O. CENTER
Creation of Computer Assisted
Desing center in Buenos Aires

Prof. A. Garnier - Director
Prof. J.M. Borthagaray - Co-Director

COLLAZZO BLAHO
Cristian Daniel
Fellowship C.A.O.
Date: April 2nd, 1990

Concerns: Research fellowship Nro 2. First report
Report Nr 1.

DEVELOPMENT OF THE RESEARCH PROGRAM. April 1990

During April, I'll start with the first step's development of my research program.

1 COLLECTION OF DATA

- 1-1 The curricular system of the technical subjets whithin the architecture career will be studied in depth so as to select the ones to be included according with the objetives of my research.
- 1-2 The following step will be to study available soft to be used during the research program taking into account the advantages and desadvantages of it's imple mentation in the technical subjets.

After this evaluation, I'll be ready to get in touch with the different professorships so as to let them know my project.

I expect to finish this research module at the end of May 1990.

Signature

ICSC WORLD LABORATORY

PROJECT: I -III LAND-5
C.A.O. CENTER
Creation of Computer Assisted
Desing center in Buenos Aires

Prof. A. Garnier - Director
Prof. J.M. Borthagaray - Co-Director

COLLAZZO BLAHO
Cristian Daniel
Fellowship C.A.O.

Date: May 2nd,1990

Concerns: Research fellowship Nr 2. Second report
Report Nr 2.

During April, I started to analyze the technological subjets of the architectural career.

WORK UP TO DATE

1 COLLECTION OF DATA

1.1- List of technical subjects during the diferent years of the career.

1.2- 1st synthesis of the subjects programs.

1.3- 2nd synthesis of the program so as to make relational graphics.

1.4- Begining of the data base.

2 - Interview with the technical department boos of the architectural, Desing and Urbanisme University (FADU-UBA), in order to organize their colab-
oration for my research.

I'll go on the analysis of the subjets with the relational graphics aplication.

Signature

ICSC WORLD LABORATORY

PROJECT: I-III LAND-5
C.A.O. CENTER
Creation of Computer Assisted
Desing center in Buenos Aires

Prof. A. Garnier - Director
Prof. J.M. Borthagaray - Co-Director

COLLAZZO BLAHO
Cristian Daniel
Fellowship C.A.O.

Date: June 1st, 1990

Concerns: Research Felowship Nr2. Third Report
Report Nr 3.

ADVANCEMENT OF THE RESEARCH UP TO DATE AND NEXT
WORK TO BE DONE TO THE END.

WORK UP TO DATE

1 COLLECTION OF DATA

- 1.1- List of technical subjects during the diferent years of the career.
- 1.2- 1st synthesis of the subjects programs. Construction of Data Base.
- 1.3- 2nd synthesis of the program so as to make relational graphics.
- 1.4- Relational graphics of each subject through its four levels.
- 1.5- Relational graphics between the different subject (thematic relation).

NEXT WORK TO BE DONE

DEVELOPMENT OF THE METHODOLOGY

SCHEME OF THE WORK

2 STUDY AND ANALYSIS OF AVAILABLE SOFTWARE

- 2.1- List of the software appliable.
- 2.2- Analysis of the characteristics, application and possibilities.

- 2.3- Study of the advantages and disadvantages.
- 2.4- Selection of programs to be used in each subject.
- 2.5- Selection of common software between the subjects.
- 2.6- Selected software referred to relational graphics.

3 INTERVIEWS WITH TECHNICAL PROFESSORS

- 3.1- Selection of professors to be consulted during the research.
- 3.2- Explanation to the professors about software application to their subjects.
- 3.3- Collection of ideas and propositions.
- 3.4- Possibilities of development of new software in the C.A.O environment.

4 ANALYSIS OF THE OBTAINED INFORMATION

- 4.1- Impact of the informatics into the architectural academic curricula
Problems to be solved.
- 4.2- Analysis of the ways of teaching.
- 4.3- Specification of the soft to be developed at the CAO. center.
- 4.4- Possible organization of the subjects with the introduction of informatics.

5 CONCLUSION

- 5.1- Exhibition the final conclusions.

Signature

ICSC WORLD LABORATORY

PROJECT: I -III LAND-5
C.A.O. CENTER
Creation of Computer Assisted
Desing center in Buenos Aires

Prof. A. Garnier - Director
Prof. J.M. Borthagaray - Co-Director

COLLAZZO BLAHO
Cristian Daniel
Fellowship C.A.O.

Date : July 2nd, 1990

Concerns: Research fellowship Nr 2. Four Report
Report Nr 4

DEVELOPMENT OF THE RESEARCH DURING JUNE 1990

- 1- I started to analyze the appliable existing software in the technical subjets.
- 2- I took in touch with the professionals that had developed specific software and with some professors of the FADU that will collaborate with my research.
- 3- I go on working in the data base of the technical subjets

The appliable software list is extensive an it's difficult to obtain information. Some professionals that have developed soft delay to deliver their technical report. And some of them (soft) are not ready for using in the C.A.O. center.

The foreigners softwares have problems with the Argentine technicals rules, and I haven't found up to now software for some subjets.

Signature

ICSC WORLD LABORATORY

PROJECT: I-III LAND-5
C.A.O. CENTER
Creation of Computer Assisted
Desing center in Buenos Aires

Prof. A. Garnier - Director
Prof. J.M. Borthsgaray - Co-Director

COLLAZZO BLAHO
Cristian Daniel
Fellowship C.A.O.

Date: August 3rd, 1990

Concerns: Research fellowship Nr 2. Five Report
 Report Nr 5

ADVANCE OF THE RESEARCH

1- Analysis of the subjects

Curricular structure
Thematic relation
Data Base

2- Study and analysis of available software

Analysis of the characteristics, application and possibilities
Possible systems to use in technicals subjects-selection
Begining of the data base

The selection has been based in the technical reports (pamphlets) supplied from software company, it's difficult to obtain from them, demos diskettes for this matter.

During August I'll continue the construction of the data base and apply each system in the thematics units of the subjects.

I'll begin interviews to Professors of FADU, reporting the theme of my research.

Signature

DEVELOPMENT OF THE RESEARCH

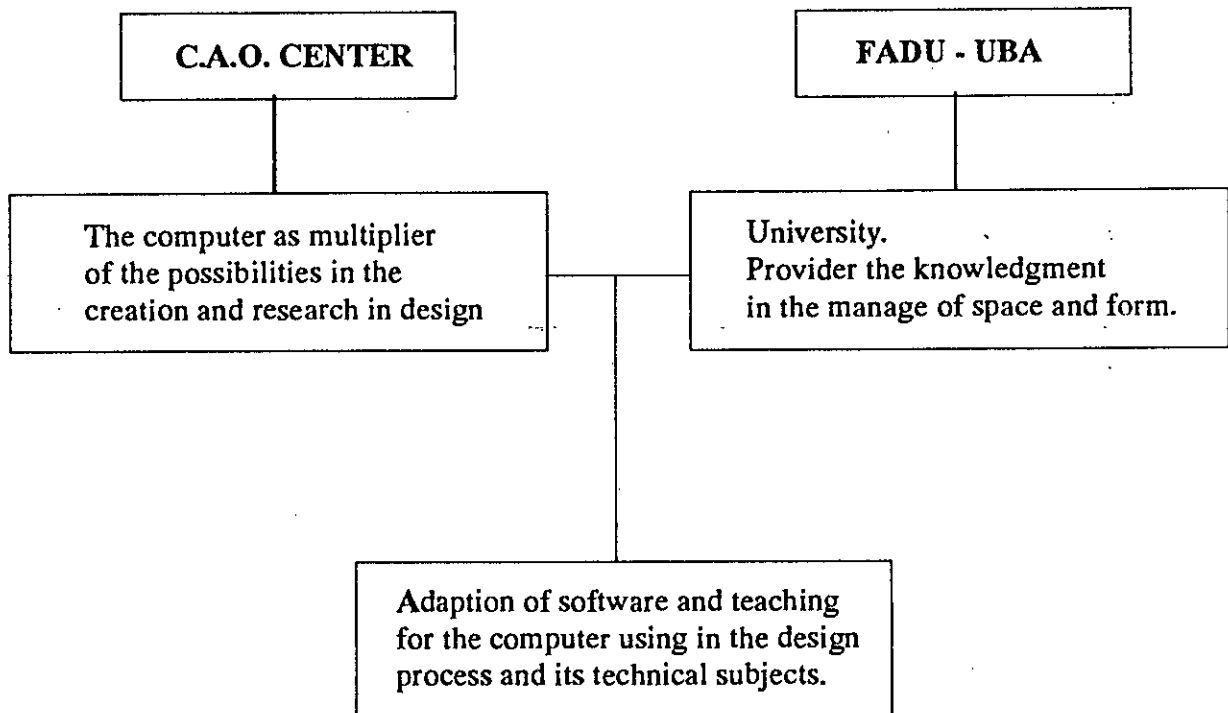
DESCRIPTIVE REPORT - CONCLUSION

1- OBJETIVES

ANALYSIS OF THE C.A.O. CENTER INSERTION IN THE TEACHING OF THE ARCHITECTURAL CARRER IN THE FADU-UBA

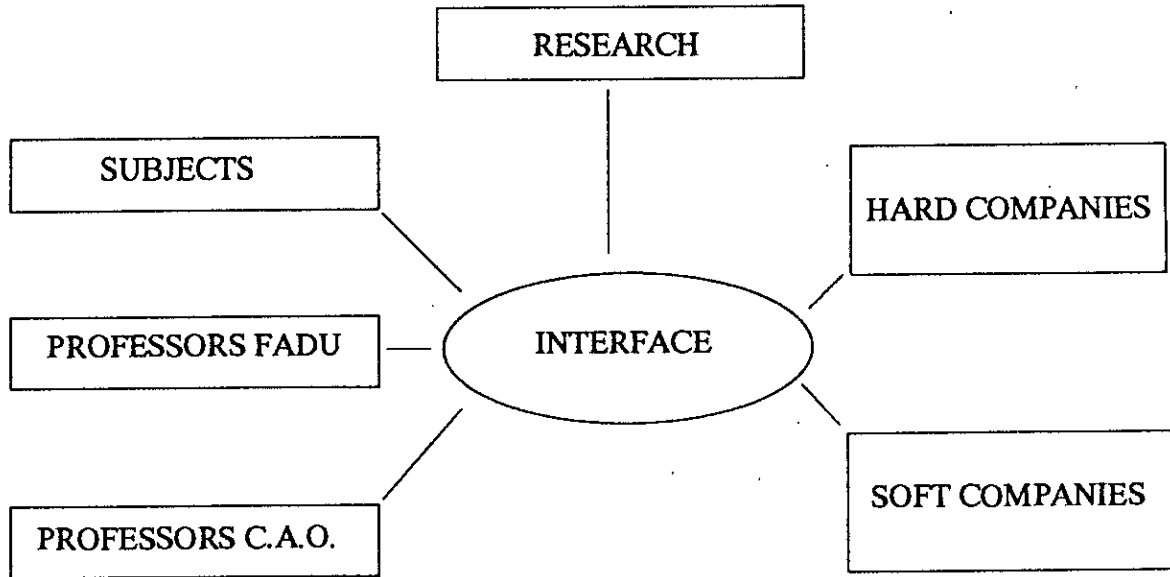
IMPACT PRODUCED FOR THE CREATION OF COMPUTER ASSISTED DESIGN CENTER IN THE CURRICULAR STRUCTURE OF THE ARCHITECTURAL CARRER.

2- CONTEXT



Necessity of an interface that analyse the common points (C.A.O.- FADU) to introduce the CAD system in the teaching of architecture.

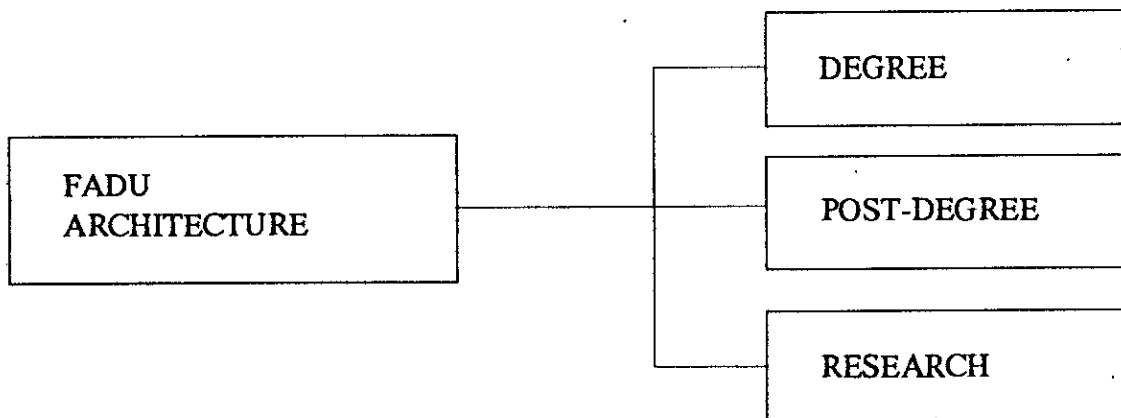
Elements that makes the interface



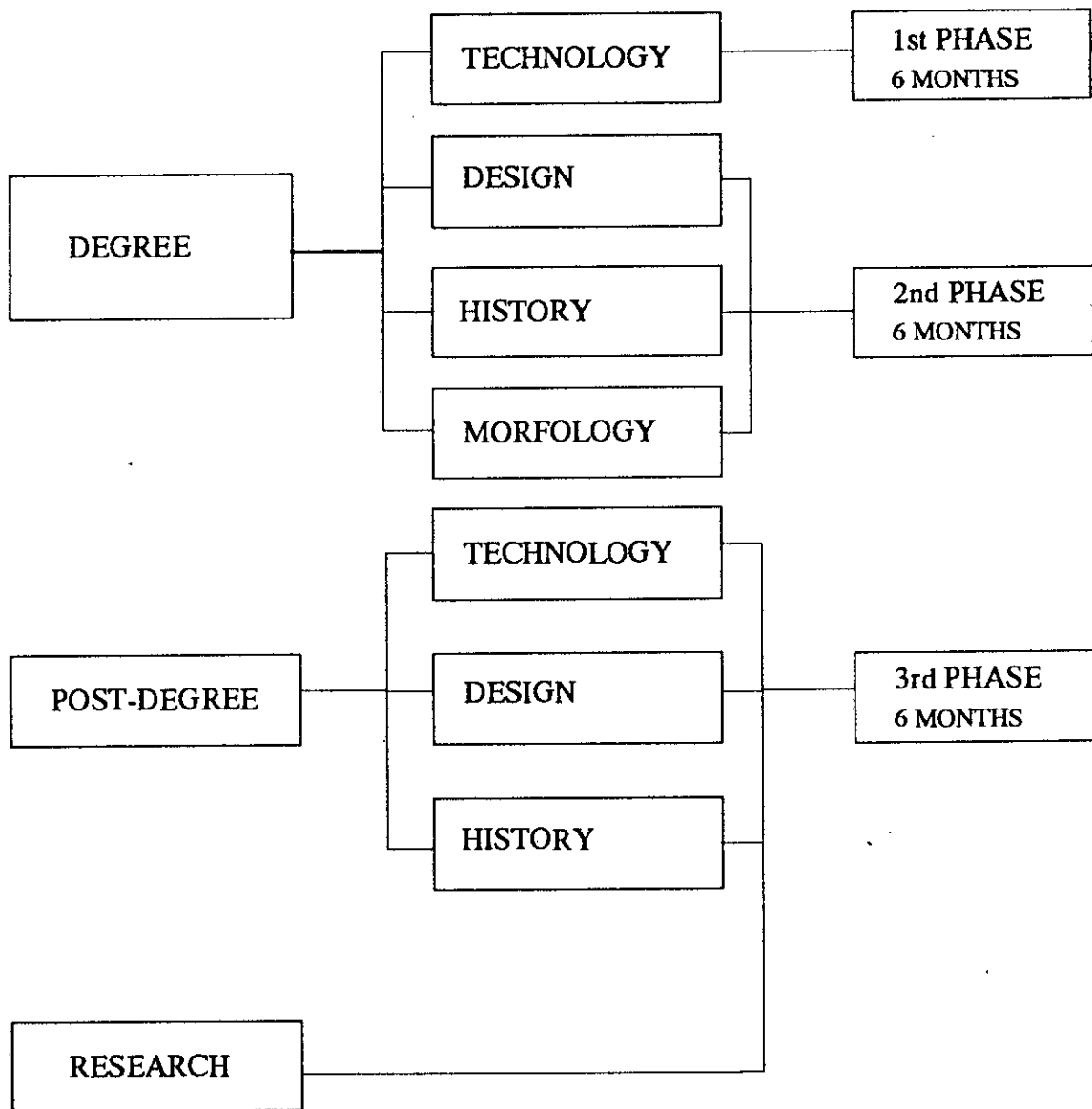
This research gives resources to the interface.

3- DEVELOPMENT - METHODOLOGY

STRUCTURE FADU

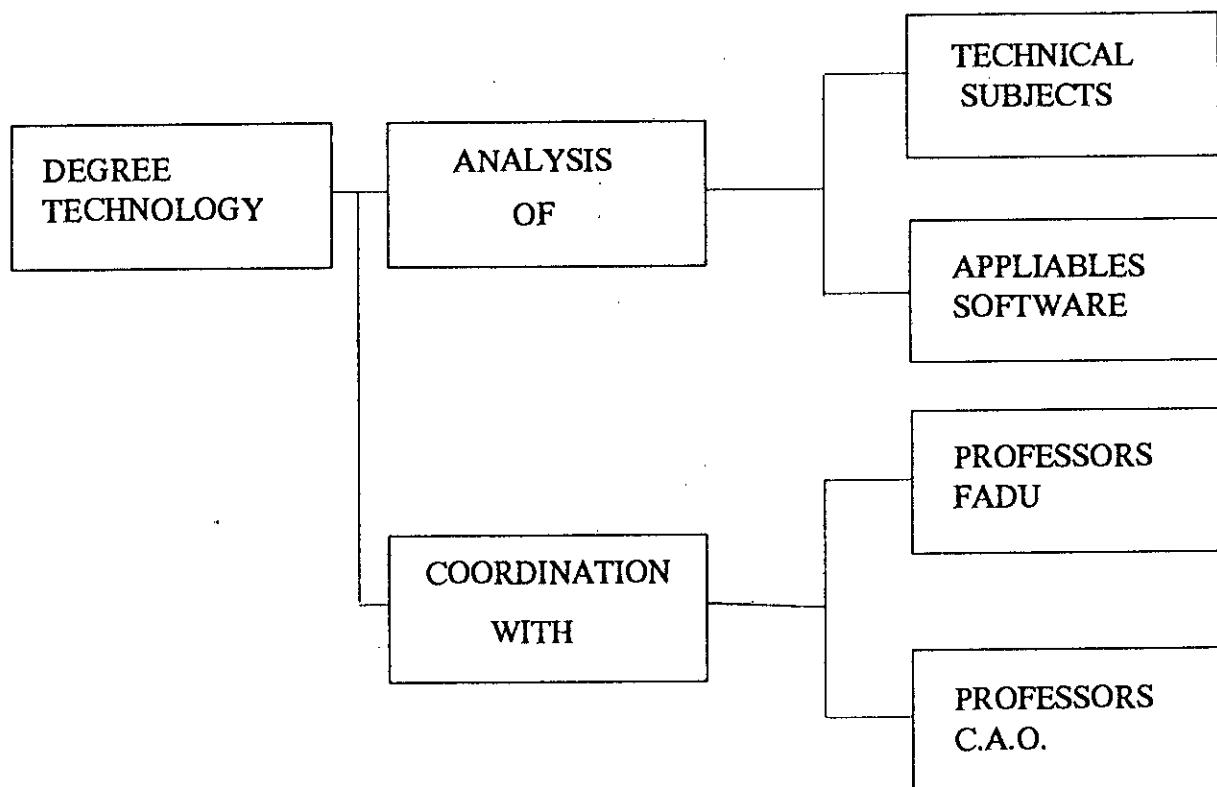


PHASES OF THE RESEARCH



FIRST PHASE - APRIL-SEPTEMBER 1990

In the first phase, I analyzed the technology degree area, with the following methodology:



ANALYSIS OF TECHNICALS SUBJECTS

ANALYSIS OF CURRICULAR STRUCTURE
TEMATIC RELATION

CONSTRUCTION OF DATA BASE

ANALYSIS OF APPLIABLE SOFTWARE

SELECTION OF SOFTWARE

CONSTRUCTION OF DATA BASE

INTERVIEWS TO PROFESSORS

METHODOLOGY

- A- Determination of professors FADU that will collaborate in the research.
- B- Exhibition of systems from soft companies to professors
- C- Meetings of work over adaptation of the informatics and teaching for computer using.

4- CONCLUTIONS

Conclutions about the analysis of the subjects.

The technologic area connected for its thematics relations.

All the tecnical subjects can be considered in a whole total for the computer insertion.

Conclusion about the analysis of the appliable software

The majority can be include directly in a program of teaching of C.A.O. in the tecnical subjects.

There is neither develop of software for the subjects of contructions and instalations nor develop of interfaces of technical systems with the CAD.

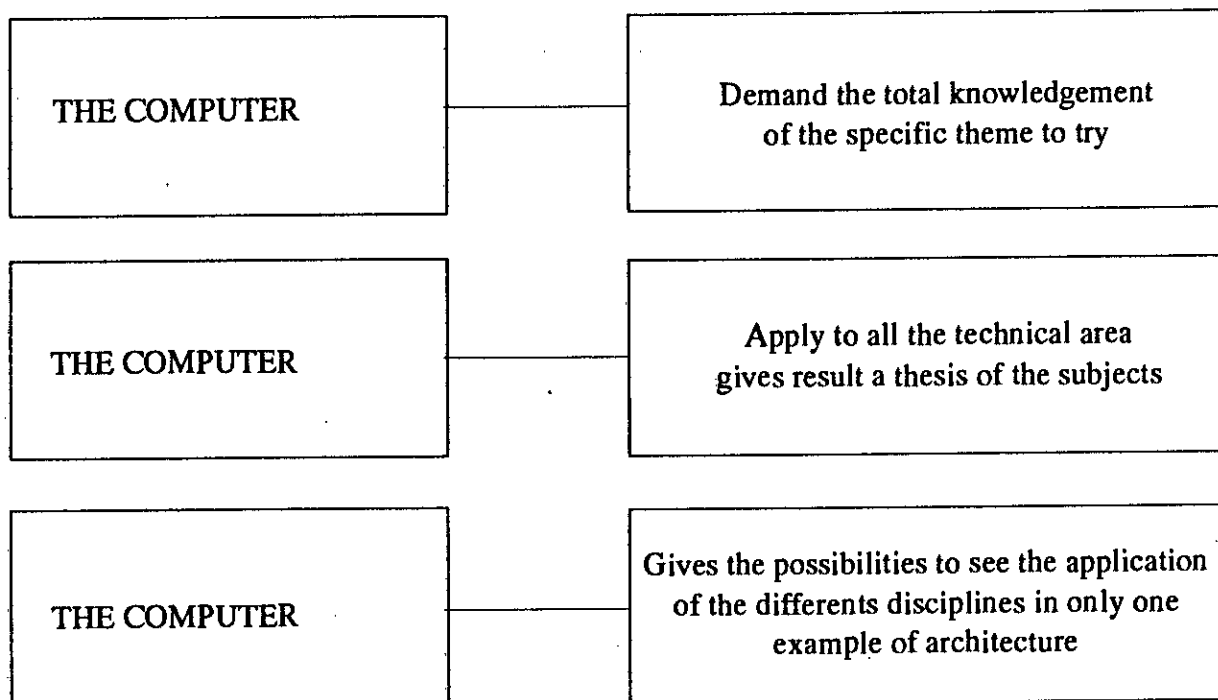
Conclutions about interviews to professors

There is good disposition of the professors

Demand to acquire knowledge

They see the necessity of teaching of informatic in the technology area.

ANOTHER CONCLUTIONS



5- PROPOSAL

From the obtained conclusions appears, the following proposals:

PROPOSAL 1

CREATION OF THE OPTIONAL SUBJECT

NAME: COMPUTER ASSISTED TECHNOLOGY

Teaching of software in:

- *Structural design and calculation
- *CAD
- *Installation design
- *Planification and budget of buildings

PROPOSAL 2

DEVELOPMENT OF SOFTWARE IN THE C.A.O. CENTER

Possibles research lines

Development of interfaces between the CAD system and the:

- *Structural's systems
- *Installation's design
- *Planification and budget of buildings.

This research is still in development

NEXT WORK TO BE DONE

To agree the systems to use in the proposed subject between the professors FADU, the professors C.A.O. and wich will be the mode of teaching.

Description of the special caracteritics in the software to research in C.A.O.

This themes will be analized in the second period of this fellowship.

ICSC WORLD LABORATORY

PROJECT: I -III LAND-5
C.A.O. CENTER
Creation of Computer Assisted
Desing center in Buenos Aires

Prof. A. Garner - Director
Prof. J.M. Borthagaray - Co-Director

COLLAZZO BLAHO
Cristian Daniel
Fellowship C.A.O.

Date: September 4th, 1990

Concerns: **Research fellowship Nr2. Six Report**
 Report Nr 6

ADVANCE OF THE RESEARCH

I have finished to study the tchnical subjects and appliable software, according to the Master Research Program, and the construction of the respective data base.

In the interviews to Professors, I detected their unknowledgement about the use of the computer.

It makes difficult to obtain opinions to adapt the informatic and teaching to the pedagogic use of the computer.

The C.A.O. Center will give course to the professors in October and it will resolved this problem.

During September, I'll continue working in the relation of the software and subjects data base to obtain information of the soft from one subject.

I'll continue interview to professors and I'll give exhibition of soft as demonstration to see the opinions.

Signature