SUBJECT PROGRAM

I.   IDENTIFICATION OF THE SUBJECT

Subject: **IT Project Development Workshop**		Acronym: **INF-228**	Approval date 10/11/2016 (CC.DD. Agreement 13/2016)		
UTFSM Credits: **6**	Prerequisite: **INF-360**	Exam: **Does not have**	Faculty		
SCT Credits:**10**			**Computer Science Department**		
Lecture Hours Weekly: **3**	Hours Assistantship Weekly: **0**	Weekly Laboratory Hours: **0**	Semester in which it is taught		
			Odd	Pair **X**	Both
Formative axis: **Applied Engineering - Computer Project Management**					
Total time dedicated to the subject: **295 chronological hours**					

Subject Description

The student integrates the project methodology through the knowledge acquired in his study plan, applying it to obtain a computer solution to a real and multidisciplinary problem. The result of the project is presented at the end of the subject, in a Computer Fair open to the internal and external community that plays the role of a final exam. It generates differentiating skills in students, associated with entrepreneurship, creativity, innovation, self-learning, teamwork and project management.

Entry requirements

- Uses processes, methods, techniques and project management tools aimed at innovative IT-based entrepreneurship.

Contribution to the graduation profile

Specific Competition.
- Formulate, develop, and manage IT projects aimed at innovation and entrepreneurship, demonstrating multidisciplinary teamwork skills.

Transversal Competencies.
- Communicate oral and written information effectively within the organizations in which one works, as well as with entities in the environment.
- Integrate, coordinate and direct work teams, applying knowledge of human, technical, economic and time management.
- Act with autonomy, flexibility, initiative, and critical thinking when facing professional problems.
- Incorporate a dynamic of permanent updating of their skills, strengthening their innovative and entrepreneurial spirit.
- Develop their work with solid criteria that allow you to ensure quality from a systemic perspective.
- Manifest behaviors and attitudes of social responsibility and tolerance, valuing ethical principles.

Learning Results that are expected to be achieved in this subject.

- Applies human resource management techniques and assignment of professional roles for the development of IT projects, considering teamwork methodologies.
- Manage multidisciplinary and innovative IT projects, using internationally recognized methodologies and tools.
- Build a computer solution in a diverse discipline to solve a real problem, considering client/user validation.

- Use effective communication strategies and digital marketing to disseminate the results of the project.

- Identify business opportunities to improve processes with computer technologies and future entrepreneurial projects.

Thematic contents

Team management:
- Planning and Acquisition of project human resources.
- Development and management of project teams.
- Leadership and teamwork. Communication and motivational aspects.
- Tools for negotiation and conflict resolution.
- Project control
- Project Management Office (PMO). Project Portfolio
- Scope, Schedule and Risk Control (includes determination of projects at risk).
- Quality Control: development and testing of the project (includes version control).

Project Execution and Closure:
- Project plan update.
- Construction of Time Sheets and Project Status Sheets.
- Development of deliverables defined as progress in the project plan.
- Legacy.

Project Dissemination:
- Marketing Strategy (corporate image, website and project video, among others).
- Relationship with stakeholders.
- Computer Fair as an example of innovation and entrepreneurship.

Note: the contents are not necessarily sequential, as they are associated with the project Deliverables.

Teaching and learning methodology

Focused on learning-by-doing associated with project development, where students must maintain the team, ideally 5 students, trained in the Project Management subject and work on the project defined there, until it becomes a final product. Team members must apply project development and monitoring techniques, carrying out effective work management, keeping documentation updated and delivering partial and final progress of the product, in addition to individual activities focused on active learning prior to class. The developed product must meet the requirements of a real client and participate in an exhibition (Computer Fair) that is held annually.

Evaluation and grading of the subject. (Adjusted to Institutional Regulations-Regulation No. 1)

Approval and qualification requirements.	It is evaluated using the following instruments:

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Instruments	%
10 Mandatory tasks (individual)	16
Project Plan Update.	8
3 Deliverables (as a team); two correspond to progress and the third is the final delivery.	60
Marketing elements (corporate image, website and project video, among others)	8
Commitment and compliance evaluation	8

The Semester Average (PS) is calculated based on the previous percentages.

Since the Computer Science Fair is the subject exam, it is a condition that only projects that successfully complete the final delivery will be able to participate in the Fair event. An additional opportunity will be offered at a later date, but the grade obtained may not exceed the worst grade for the project delivered at the appropriate time. The team that fails

final delivery, fails the subject without being able to exhibit at the Fair.
The Computer Fair includes, among others:
• Marketing associated with the event
• Team communication skills
• Client Evaluation via Acceptance Letter   Entrepreneurship Potential Assessment

Final Note calculated as:
$$NF = 0.65 * PS + 0.35 * Fair$$

Learning Resources

Virtual platform

Bibliography:

Guide Text	• Project Management Institute , (2013). A Guide to the Project Management Body of Knowledge: PMBOK(R) Guide, Project Management Institute; 5th ed.
Complementary or Optional	• Magazine articles, cases and videos.

II.   CALCULATION OF NUMBER OF HOURS OF DEDICATION - (SCT-Chile) - SUBJECT SUMMARY TABLE

ACTIVITY	Number of hours of dedication		
	Number of hours per week	Number of weeks	Total number of hours
PRESENCE			
Lecture or theoretical classes	3	17	51
Assistantship/Exercises			
Industrial visits (from Field)			
Laboratories / Workshop			
Evaluations (exams, others)			
Others (Computer Fair)	24	2	48
NO PRESENCE			
Assistantship			
Mandatory tasks (Individuals)	3	12	36
teamwork _ (Deliverables)	twenty	8	160
Others			
TOTAL (HOURS)			295
Total number of TRANSFERABLE CREDITS			10