### Annex 1: FGP CHARTER

**CHARTER OF THE PROPOSED**

**FINAL GRADUATION PROJECT (FGP)**

1. Student name

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1. FGP name

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| Must be related to the FPG end product  Example: Design guidelines of the construction of clinics that allow compliance with the LEED standards. |

1. Application Area (Sector or activity)

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| Construction / Medicine / Banking / etc. |

1. Student signature

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1. Name of the Graduation Seminar facilitator

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1. Signature of the facilitator

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1. Date of charter approval

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1. Project start and finish date

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1. Research question

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| It is the definition, structured as a question, of the problem, concern or doubt of the researcher. Must allow to focus the research and therefore, must be as clear and concise as possible. Shouldn’t be answered by a single “yes”, “no”, “I don’t know” or “not answered”. Shouldn’t suggest the answers “this or that”.  Example: What elements must have a guide that allows the design and construction of clinics that comply with the LEED standards? |

1. Research hypothesis

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| It corresponds to a provisional statement previous to the research start. The purpose of the research it to achieve the verification or denial of the hypothesis  Example:  Is it possible to build a manual for the design and construction of clinics in Costa Rica which might allow for its LEED certification? |

1. General objective

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| Objectives, general and specific, must start with an action verb in infinitive form, that allows to assess its completion, must be clear and concise, should have complete sentences and must have a “what?” and a “for what?”. Objectives must be fully related to the Project to be developed as your FGP.  General objective: describes the end result of the project and it’s related to its name.  Example: To develop a design and construction guideline for clinics that allows its compliance with the LEED standards. |

1. Specific objectives

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| Specific objectives must start with an action verb in infinitive form, that allows to assess its completion, must be clear and concise, should have complete sentences and must have a “what?” and a “for what?”.  Specific objectives  The number of these objectives must be the one needed to achieve the general objective. Each one must be numbered in Arabic numbers and must be ordered in a logic sequence related to the project completion.  Example:   1. To develop a report that documents the analysis of different clinics constructions standards to define its basic elements. 2. To create an analysis report of the LEED standards which can be applied to the clinics in the country, in order to define the basic elements to fulfill in order to be able to certified the construction. 3. To define the needs to be fulfilled by a clinic, with regards to services, to focus on the most important design requirements. 4. To define the design and construction guidelines for clinics to be LEED certified. |

1. FGP purpose or justification

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| Must define the importance of the project, why the project is to be done and its expected benefits. Shouldn’t be long (you can limit the description to three paragraphs). At least one part of the justification must be quantitative in order to determine its impact in that aspect.  Example:   1. There are no similar guidelines in the country to the one proposed, neither in any other country of Latin America (based on the bibliographical research) 2. Annual investment in public clinics which is of $XX million must be optimized for LEED compliance. 3. Clinics certification can be upgraded by using international standards such as LEED in order to guarantee a sustainable design and construction. |

1. Work Breakdown Structure (WBS). In table form, describing the main deliverable as well as secondary, products or services to be created by the FGP.

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| Breakdowns in a clear, specific and measurable way each one of the products to be delivered by the project, which corresponds to each one of the objectives (general and specific).  Each deliverable must be related to one specific objective (there might be more than one deliverable per objective however this is not very common). Remember that a deliverable is a document, report, design, work or plan.  Example (in your FGP you must follow the same structure showed here including the indentations to indicate a lower level in the WBS):   1. FGP    1. FGP profile   1.1.1 Introduction  1.1.2 Theoretical framework  1.1.3 Methodological framework  1.1.4 Preliminary bibliographical research  1.1.5 Annexes (FGP schedule, FGP WBS, FGP Charter)   * 1. FGP development   1.2.1 Report of the clinic construction standards.  1.2.1.1 Standards reading and analysis report.  1.2.1.2 Standards features found from the design and selection criteria.  1.2.1.3 Report writing.  1.2.2 Report and analysis of LEED standards.  …  1.2.3 …  …  1.2.4 …  …  1.2.5 Conclusions  1.2.6 Recommendations  1.2.7 Reference lists  1.2.8 Annexes  1.2.9 Tutor approval for reading.   * 1. Reader’s review.   2. Board of examiners evaluation. |

1. FGP budget

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| Detail the budged that you estimate is necessary to develop your FGP document (relevant costs).  It is not necessary to calculate the student time. Neither is it related to estimate the budget for the project of your FGP (following the same line of previous examples in this document, it is not to estimate the cost of the LEED certified clinics).  Examples: software licenses acquisition, hardware, work tours (transportation, lodging and food), interviews in person (focus group or forum type), information processing. |

1. FGP planning and development assumptions

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| Facts assumed to be true for planning purposes. Its validity must be confirmed as the project progresses. Describe at least four assumptions.  \*\*Be careful, and element included as assumptions cannot be repeated as risk or constraint.\*\*  Examples:  Information about clinics in the country is organized and available.  LEED standards access will be non-restricted and there will not be limitations to its use for academic purposes.  Researcher time for the FGP will be at least 15 hours per week during the FGP development process. |

1. FGP constraints

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| Limiting factors which limit the student in charge of the FGP for its fulfillment.  Might be related to time, cost, scope, quality. Describe at least four constraints.  Examples:  The maximum time frame to finalize the FGP is 12 weeks.  Private clinics will not be part of the analysis. |

1. FGP development risks

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| Identify and list clearly each one of the risks.  Describe them in written in such a way that there are related to the root cause with the risk event and with the impact in the FGP. Describe at least four risks.  \*\*Be careful, and element included as risk cannot be repeated as restriction or assumption.\*\*  Example:  A strong hurricane season might delay the work tours and the data collection in the field, which might delay the deliverables development. |

1. FGP main milestones

Milestones are related to deliverables on the second level (deliverables) and third level (control accounts) of the WBS of section 14 of this Charter. At the same time the deliverables are related to the specific objectives (in the case of the FGP please include the times for the tutorship reviews as well as for the readership).

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| **Deliverable** | **Finish estimated date** |
| 1.1 FGP profile |  |
| 1.1.1 … |  |
| 1.2 FGP development |  |
| 1.2.1 … |  |
| 1.2.2 … |  |
| 1.2.3 … |  |
| 1.3 Readers review |  |
| 1.4 Board of examiners evaluation |  |

1. Theoretical framework
   1. Estate of the “matter”

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| Background description and current status of the problem and research done about it. The current state of the problem or situation being studied is commented. How has it been resolved until now?, which improvements have been proposed?, what has been the result of its implementation?, have there been another research works done about it? What were the results of those research works?. Mention any other factors that help to better understand the problem and its current status.  Example: Considering the clinics example which has been using along this document: Description of what a clinic is, what is its function and benefits and functional features. Factors such as current status of the implementation of sustainable design and construction in clinics and what standards are being used for those purposes.  In order to complete this section several research activities can be used: bibliographical (reports, thesis, books or magazines, interviews to experts of clinic functionaries, field observation, etc. |

* 1. Basic conceptual framework

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| List of the basic concepts to be included in the document.  Examples: project management, LEED certification, clinics, sustainable design and construction, etc. |

1. Methodological framework

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| **Objective** | **Name of deliverable** | **Information sources** | **Research method** | **Tools** | **Restrictions** |

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| 1 To develop a report that documents the analysis of different clinics constructions standards to define its basic elements. | Report of the construction standards for clinics construction. | Secondary:  thesis, reports  Primary: field interviews. | Qualitative. Written information analysis. | Bibliographical files  Questionaries (SurveyMonkey, Google Forms)  Semi-structured interviews  . | Few books on the subject.  Difficult to define the population and thus the sample.  Limited time of the personnel. |

1. Validation of the work in the field of the regenerative and sustainable development.

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| How is the FGP to comply with the concepts of the regenerative and sustainable development?  How adds the proposed project to the regenerative and sustainable development?  Include potential indicators and way to measure them. |