

# School of Engineering

# HCI Master Master Program in Human-Computer Interaction

# Study Guide

Academic Year 2023-2024

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### 1. Introduction

The Master Program in Human-Computer Interaction is run by the departments of **Electrical and Computer Engineering**, and **Computer Engineering and Informatics** at the School of Engineering of the University of Patras. The faculty that participates in the programme is also from the Departments of Mechanical and Aeronautics Engineering, Dpt. of Management Science and Technology of the University of Patras, as well as from the National Technical University of Athens, Hellenic Open University, and the Ionian University. This is the only postgraduate program in Greece in this area and is run since the academic year 2018-2019. The first cohort of students enrolled in the program in the academic year 2019-2020. The current academic year is the fourth cohort of students that enrolled in the program.

The programme under the current decision of the Senate of the University of Patras, is planned to run until the Academic Year 2025-26.

More current information about the Programme is provided on its website: <u>http://hcimaster.upatras.gr</u>



The University of Patras Campus, with a view to the bay and Rio-Antirio bridge

### Objectives

The Programme's objective is to provide specialised theoretical and applied knowledge, and to produce new knowledge, in subjects that concern the study, design and development of interactive technologies, i.e. technologies that interact with their users, as well as the study of phenomena that relate to the interaction of users with modern technologies. As added value, graduates of the fields of Computing and Informatics, or other Sciences, with a sufficient background in computer science and technology, will obtain knowledge and skills that will allow them to extend their knowledge and skills and render them professionals, capable of designing innovative interactive technologies, and able to provide design and evaluation services for interactive systems, to research and industry in the public or private sector in Greece and internationally.

According to the established Greek and European education systems, the second level of higher education studies, to which this Postgraduate Programme adheres, involves enrollment in a Postgraduate Study Programme (PSP) which leads to the award of a Degree of Postgraduate Study (DPS, Master).



HCI Master Orientation Event 2018-2019

### Learning outcomes

The student on completion of the Master in Human-Computer Interaction is expected to have specialised knowledge, some of which is cutting-edge, in the field of UX/UI work (design and evaluation of user interfaces) and the study of human-computer interaction, which form the basis for original thinking.

He/she is expected to have a critical awareness of the cognitive issues in the field of human-computer interaction and its relationship with other areas

contributing to the design, development and evaluation of interactive systems, such as the areas of virtual reality, software quality and software engineering in general, artificial intelligence, web technologies, ergonomics, visual representation and design, statistical analysis of user interaction data, etc.

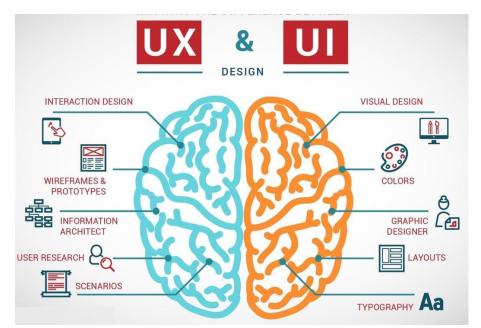
The graduate is also expected to possess specialised problem-solving skills required in research and/or innovation, to develop new knowledge and processes and to integrate knowledge from these different fields.

Furthermore, the programme graduate will be able to manage and transform complex and new problems requiring strategic approaches. They should be able to take responsibility for contributing to professional knowledge and practice and for evaluating the performance of teams with a strategic role in this field.

The courses included in the curriculum are all of equal load and weight (6 ECTS, requiring 150-180 hours of work from the student). The way of assessment of learning outcomes in all courses includes a mixed system of short tests, writing assignments in innovative subjects, which require original and critical thinking, guided group work solving formal problems.

### Employability of graduates

The graduates of this master's program are in high demand in the industry and research in Greece and around the world. Past graduates have been employed as **front-end designer/developers**, that connect graphical design and technical implementation to create intuitive web experience, as **product managers & designers or product designers** that evaluate existing products and improve them to serve individuals and/or companies better, as **interaction designers**, who design a product through wireframes and prototypes to improve user experience, motion, sound, time, physical environment and/or the overall look and feel, as **user experience designers/researchers**, i.e. as researchers skilled in analyzing and identifying the identity and behavior of end users to design more effective products, as **human factors engineers**, who design objects, facilities and environments that consider the principles and theories around human experience and ergonomics.



User Experience (UX) and User Interface (UI) Designers are in high demand in the industry (image from https://uxdesign.cc/why-ux-and-ui-should-remain-separate-7d6e3addb46f)

### The University of Patras – Living in Patras

The University of Patras is one of the top Greek Universities. According to QS <u>QS World University Rankings 2023</u> it is ranked in the group of 801-1000 most highly ranked universities in the world, ranked in the fifth place among Greek universities. According to the same ranking, it is in the group between 250 to 300 ranked universities in Engineering and Technology for 2022.

According to the Erasmus Students exchange <u>web site</u>, Patras as the 3rd biggest city in Greece, offers its students the opportunities of a big city and the calm life of a smaller one. Living in Patras can be nice especially for students. The city is not big and life here is quite calm. Patras during the winter is characterized by its bright atmosphere, created by the big number of students that live in the city. Patras is ideal for students because of its nightlife, the variety in cafes, bars, and clubs. Living in Patras is cool! we recommend it!



Patras, the city center

Patras is a student city. More than 40. 000 students are living here. The lifestyle in Patras is ideal for students. Living in Patras means to cross the whole city centre in 15 minutes on foot; to live nearby the sea, to meet a lot of young people and have fun, to walk alone at night and don't be afraid.

#### Living Cost in Patras

It doesn't cost too much to live in Patras. Supposing that you will have to pay 250- 300 euros to rent a house (with the bills included), especially if you have flatmates, you need 200 euros per month for everything else. However, this isn't absolute, as it depends on the lifestyle you have. Prices are not different from other Greek cities. (Athens maybe is more expensive in some respects). Regarding transportation, the student ticket from the city centre to the university costs o, 75 euros but if you choose the train, you can have a student card for 15 euros per month. The student ticket costs 1 euro.

## 2. Program Regulations

In the following sections the main points of the Regulation that governs the programme are outlined.

### Article 1. Programme Foundation decisions

The Interdepartmental Postgraduate Study Programme on Human-Computer Interaction was founded with the decision number 2275/31757/10-10-2018 (Government Gazette Issue B 4824/30.10.2018) as currently valid, and approved by the Senate of the University of Patras (141/4.10.2018) and the General Assemblies of the Departments of Electrical and Computer Engineering (meeting no. 12/8-5-2018) and Computer Engineering and Informatics (meeting no. 132/17-4-2018) of the University of Patras.

It is governed by the regulations of law 2285/2017, the Internal Operating Regulation of the University of Patras concerning postgraduate studies, and this Regulation. This Regulation is currently in process of modification to adhere to the new Framework governing higher education in Greece (N. 4957/2022, articles 80 to 89 that concern organization of postgraduate programmes of study).

The Human-Computer Interaction Programme exclusively leads to the award of an Interdepartmental Postgraduate Study Diploma (IPSD-Master's Degree) in Human-Computer Interaction (HCI Master).

### Article 3. Governance Bodies and Members of the Programme

### 3.1. Governance Bodies

Governance bodies consist of faculty members (Professors and Lecturers) of the University of Patras, according to the provisions of article 32 of law 4485/2017 and the Internal Regulation for postgraduate studies of the University of Patras. For the organization and operation of the Programme, the relevant governance bodies are:

a) The **Senate** of the University of Patras: it is responsible for all subjects of academic, administrative, organizational, and financial concern to the Programme

- b) The Special Interdepartmental Committee (Programme Coordination Committee), now Committee of the Programme of Study: it is comprised of seven (7) members, four (4) faculty members elected by the General Assembly of each department to serve for a period of 2 years, the Programme Coordinator, according to article 31 paragraph 8 of law 4485/2017 and two (2) representatives of the Programme postgraduate students, elected by the students, and serving for a period of 1 year. The duties of this Committee under the new Framework Law N. 4957/2022, article 41 are undertaken by the Committee of the Programme of Study. This Committee has the following duties and is responsible for any other subject according to the provisions in Chapter 6 of law 4485/2017:
  - It appoints the Coordination Committee (Coordination Committee) of the Programme to serve for 2 years
  - It appoints the Programme Coordinator (CPS) and the Vice-Coordinator of the Programme to serve for two years
  - It appoints the postgraduate students' Candidates Evaluation Committee (CEC)
  - It selects the postgraduate student applicants for admission after recommendation by the CEC
  - It decides upon the management of the HCI-Programme financial resources
  - It assigns teaching duties to the instructors of postgraduate courses
  - It decides for the temporary suspension of study, which cannot exceed two (2) continuous semesters, and the extension of the study period, which cannot exceed half of the normal period of study in the Programme (one semester).
  - It certifies the successful completion of studies to award the IPSDmaster's degree.
  - It invites established scientists from domestic or international institutions as visiting instructors according to article 36 paragraph 5 of law 4485/2017
  - It decides on modifications to the study programme, after recommendation from the Coordination Committee.
- c) The **Coordination Committee** of the Programme: it consists of five (5) faculty members from the cooperating departments which have

undertaken postgraduate responsibilities, and who are elected from the Programme Coordination Committee.

The Coordination Committee has the following membership:

- 1) The Coordinator of Postgraduate Studies of the Programme, who presides over the Coordination Committee
- 2) Four faculty members from the Programme instructors, two members from the Electrical and Computer Engineering department and two members from the Computer Engineering and Informatics department

The Coordination Committee period of service is for two years. The Coordination Committee is responsible for the observation and coordination of the programme's operation according to the provisions of article 31 paragraph 5 of law 4485/2017, and specifically:

- It recommends to the Committee of the Programme of Study the Supervising Professor (SP), the Postgraduate Diploma Thesis title and the Three-members Examination Committee for every Postgraduate Student (PS).
- It recommends to the Committee of the Programme of Study any relevant changes to the Study Programme. The Study Programme is published in the form of a Study Guide.
- d) The University of Patras Postgraduate Study Committee (PSC): it is composed of the Vice-Rector for Academic Affairs, who serves as the committee president, and the School Deans as members. It has the duties provisioned article 32 paragraph 5 of law 4485/2017. This Committee has, now a new structure, according to Article 79 of law 4957/2022.
- e) The **Programme Coordinator**: The Coordinator presides over the Committee of the Programme of Study and the Coordination Committee and is appointed together with their Vice-Coordinator for a duty period of 2 years, service to be renewed once (according to article 31 paragraph 8 of al 4485/2017), after secret voting. An absolute majority is required for their election. In the case of more than two candidates, the voting is repeated between the two prevailing candidates, where a simple majority is sufficient for election. The coordinator must be at the grade of Professor or Associate Professor, must have the same or a related knowledge domain as the Programme and be an instructor in the Programme. The coordinator introduces to the committee of the

Programme of Study and the Coordination Committee any subject that relates to the efficient operation of the Programme, and more specifically undertakes a duty to:

- Be responsible for the scheduling of classes, exercises, and examinations
- Compose of an analytical account of the research and teaching outcomes of the Programme
- Make recommendations to the relevant governing bodies, relating to funding sources for the Programme
- f) The **Vice-Rector** for Academic and International Affairs of the University of Patras has the supervision and general coordination of postgraduate studies at the Institutional level.

The current membership of the above Governance bodies is as follows:

The <u>Senate</u> of the University of Patras

### Programme Coordinator:

Michalis Xenos, Professor, University of Patras, Dpt. Of Computer Engineering & Informatics

Michalis Xenos, continues the work of the previous programme Coordinator: <u>Nikolaos Avouris</u>, Professor, University of Patras, Dpt. of Electrical and Computer Engineering (Coordinator)

Members of the Committee of Programme of Study and of the Coordination Committee:

- <u>Michalis Xenos</u>, Professor, University of Patras, Dpt. Of Computer Engineering & Informatics
- <u>Christos Fidas</u>, Assistant Professor, University of Patras, Dpt. Of Electrical and Computer Engineering
- <u>Kyriakos Sgarbas</u>, Associate Professor, University of Patras, Dpt. of Electrical and Computer Engineering
- <u>Andreas Komninos</u>, Assistant Professor, University of Patras, Dpt. of Computer Engineering & Informatics

• <u>Sofia Daskalaki</u>, Assistant Professor, University of Patras, Dpt. of Electrical and Computer Engineering

Vice-Rector for Academic and International Affairs of the University of Patras:

• <u>Dionissios Mantzavinos</u>, Professor, Department of Chemical Engineering

### 3.2. Teaching Staff

The teaching and supervision duties of the Programme and the examination of Diploma Theses can be undertaken by persons as mentioned in the provisions of article 36 of law 4485/2017 (Government Gazette Issue A 114) and specifically:

a) at least eighty percent (80%) of the instructors must be faculty members, special teaching staff, laboratory teaching staff, special technical laboratory staff or instructors provisioned by the 407/1980 presidential decree, or article 19 of law 1404/1983, or article 29 paragraph 7 of law 4009/2011, or retired faculty members of the Programme cooperating departments. All instructors must possess doctoral degrees, unless their knowledge area is one of exceptional and uncontested particularity, for which the attainment of a doctoral degree is not usual or possible.

b) Under the reservations from the previous paragraph, the Committee of the Programme of Study evaluates the Programme's needs for teaching staff, and in the case where existing faculty members, special teaching staff, laboratory teaching staff, special technical laboratory staff, retired faculty members or instructors provisioned by the 407/1980 presidential decree, or article 19 of law 1404/1983, or article 29 paragraph 7 of law 4009/2011 are not sufficient, the committee can appoint teaching duties, after justified decision, to other members of faculty from departments of the same institution, or to invite faculty members from other institutions, or researchers from research centers as provisioned in article 13A of law 4310/2014, including research centers, or make new appointments and contracts under the provisions above.

c) The Committee of the Programme of Study can decide, after recommendation from the Coordinator of the Programme, to invite national or international established scientists who are faculty members, or have equivalent qualifications to a faculty member, or are researchers at a research center, or scientists of recognized stature with specialized knowledge or related experience, to cover teaching needs in the Programme, according to standing legislature.

d) Peer professors and retired faculty members of Higher Education Institutions can teach in the Programme, according to the provisions of article 16 paragraph 8 of law 4009/2011 and the regulation of postgraduate studies and are subject to the provisions in article 36 paragraphs 3 and 4 of law 4485/2017.

e) Teaching in the Programme courses is allocated by the General Assembly of the department to which the related teaching staff belongs, after recommendation by the Programme Coordination Committee. For retired faculty members, a decision by the Committee of the Programme of Study is sufficient.

Teaching staff duties include the composition of a course descriptor and related bibliography lists, to decide upon appropriate examination methods, and to manage communication with the postgraduate students.

### Article 4. Admission of postgraduate students

### 4.1 Call for Applications

For the admission of postgraduate students, a call for applications (CFA) is issued yearly, after decision by the Programme Coordination Committee. Applications are submitted in two phases. The first phase has a deadline for the submission of applications and supporting documents in the period of June-July, according to the Programme Coordination Committee's decision.

Positions not filled during the first phase can be filled after the second deadline for the submission of applications and supporting documents, in the period of August and with a deadline no later than August 31<sup>st</sup> of each year. The publication of the CFA is carried out by the University of Patras, under responsibility of the relevant academic departments, and the cost is undertaken by the University.

The Candidate Evaluation Committee (CEC) is appointed after decision by the Committee of the Programme of Study for a two-year period and consists of four (4) faculty members of the cooperating departments. The CEC recommends to the Committee of the Programme of Study, the applicants to be selected for admission, taking into consideration the relevant legislative provisions, so that the Committee of the Programme of Study can make the relevant decision. The



CEC composes the postgraduate student selection decision document, and it is validated by the Programme Coordination Committee. The selection process is completed by the start of September each year.

The necessary supporting documents that accompany applications are described in Annex A, as well as in the Call for Applications each year. Candidates submit their applications electronically at website announced on the Programme website.

For more information, candidates can contact:

Secretarial Office, 1<sup>st</sup> Floor, Electrical and Computer Engineering Department, School of Engineering, University of Patras, Rio 26504, Greece

Email: secretary-postgrad@ece.upatras.gr

http://hcimaster.upatras.gr

### 4.2. Applicants

The Programme accepts graduates from departments of Electrical and Computer Engineering, Computer Engineering and Informatics, Electrical/ Electronic Engineering and Computer Engineering, Physics, Mathematics, and Informatics, from Greek or international Higher Education Institutions recognized by the Hellenic National Academic Recognition and Information Center (NARIC - DOATAP), as well as graduates from Technological Educational Institute departments of a related discipline.

Applications can be submitted by final year students of the aforementioned departments, who have not completed their studies by the application deadlines due to procedural delays (e.g., delayed announcements of examination results). Such students can attend postgraduate courses

(conditional attendance). These applications are evaluated once a student completes their degree studies in the September examination period and submits a Certificate of Study Completion and their degree grade by November 1<sup>st</sup>.

### 4.3. Number of Students

The maximum number of postgraduate student admissions is thirty (30). Special teaching staff, as well as special laboratory staff and special technical laboratory staff of the cooperating departments who fulfill the requirements set out in the first section of paragraph 1 as well as paragraph 8 of article 34 of law 4485/2017, can be admitted in the Programme over the maximum number of admissions and to a maximum of one person per year, as per the specific conditions provisioned in article 45 of law 4485/2017.

### 4.4. Candidates Selection

The criteria for **candidate selection** are:

- A graduation grade of 7/10 or equivalent, taking into account the classification of the degree (Excellent, Very Good, Good) with a weighting factor of two (2).
- The grades in undergraduate courses related to the Programme, under condition that at least 20 ECTS have been awarded from such courses (Excellent, Very Good) with a weighting factor of two (2)
- Performance in the undergraduate thesis, if required (Excellent, Very Good, Good) with a weighting factor of one (1)
- Any research activity (publications) and/or professional experience relevant to the Programme (Excellent, Very Good, Good) with a weighting factor of one (1)
- Good working knowledge of the English language (at the B2 level or greater, as awarded through a national language certification) (Excellent, Very Good, Good) with a weighting factor of one (1)
- The department of graduation of the candidate with a weighting factor of one (1)
- The reference letters submitted with a weighting factor of one (1)
- Further qualifications (other languages, IT skills etc.) with a weighting factor of one (1)

• Performance during the candidate interview (considering their personality, scientific formation) with a weighting factor of two (2)

### 4.5. Selection Decision

The Candidate Evaluation Committee (CEC) proposes a table of evaluation rankings of successful candidates, which is validated by the Programme Coordination Committee, considering the candidate scores attained from the criteria. After the table formulation, candidates are selected until the number 30 is reached. In the case that some of the selected candidates do not register for the Programme, the number is filled from subsequent candidates in the table. In the case that two or more candidates have an equal score for the last remaining position, the candidate with the highest degree grade is selected.

### Article 5. Registration – Selection of Courses – Specialisation

### 5.1. Registration

The admitted candidates are registered in the first fortnight of October, within deadlines set by the Programme Coordination Committee. In special circumstances, candidates may apply (providing full justification) to be allowed to register up to a month after the deadline. Such applications are decided upon by the Programme Coordination Committee.

### 5.2. Registration renewal

Postgraduate students are required to renew their registration every semester. The renewal takes place electronically at the start of each semester, at a deadline set by the Secretariat of the Electrical and Computer Engineering Department. The postgraduate students are required to register for each postgraduate course they wish to attend in the Winter and Spring semesters, according to article 6.3 of this regulation.

### 5.3. Suspension of studies

In exceptional circumstances, a postgraduate student can apply for a temporary suspension of studies, which may not exceed more than two (2) continuous semesters. The decision is taken by the Programme Coordination Committee. During study suspension, all provisions to the student are revoked.

### 5.4. Study extension

In exceptional circumstances (e.g., illness, grave family or professional issues, conscription, force majeure), the study period may be extended by up to half the normal study period (one semester), after application by a postgraduate student and approval by the Programme Coordination Committee.

### 5.5. Student Removal

Postgraduate students who do not renew their registration, or have not followed courses, or have not conducted research for more than two (2) semesters, lose the status of Postgraduate Student of the University of Patras and are removed from the Programme student registry.

### 5.6. Acceptance of terms

The terms of study which are described in the Study Regulation of the Programme are accepted by each candidate upon registration. Candidates are informed of the provisions in the Study Regulation prior to registration.

### Article 6. Structure of studies of the Programme

The Programme will operate until academic year 2025-2026 subject to valid regulations.

### 6.1. Duration and structure of Studies – Teaching calendar

The minimum study duration for the award of the Interdepartmental Postgraduate Study Diploma is three (3) academic semesters, including the required time to complete the postgraduate Diploma Thesis.

The maximum study duration amounts to six (6) semesters and does not include the September examination period of the third academic year. Postgraduate students who have exceeded the maximum duration of four semesters for the successful completion of courses, or who have failed in three examinations of the same course (including the September examination period) are automatically removed. The first academic year of full time study includes the equivalent of at least twenty six (26) teaching weeks, and three examination periods (February, June and a full re-sit examination period in September).

The postgraduate Diploma Thesis is carried out in the third (final) semester. Students may begin to carry out thesis work after having attained a pass mark in taught subjects totaling 36 ECTS.

Each teaching semester includes at least thirteen (13) teaching weeks. The teaching in teaching semesters takes places across dates set out by the Senate. The schedule of classes/exercises of each semester is formed and announced by the Coordinator at least ten days prior to the start of the semester. The examination schedule of each semester is also formed and announced by the Coordinator.

The timetable for the Winter Semester of the current Academic Year is shown next on the program website <u>https://hcimaster.upatras.gr/program-outline/</u>

### 6.2. Postgraduate courses

The total credit units (ECTS) required to obtain the IPSD-master's degree is ninety (90). Courses are taught in English or Greek according to the needs of the audience, Exams, Project work and the postgraduate Diploma Thesis are written in English. For the award of International Postgraduate Study Diploma (IPSD-master's degree) students are required to attend and be successfully examined in ten (10) courses with a duration of one semester each, 2 compulsory + 3 electives) in the first semester, and 1 compulsory + 4 electives in the second semester, as well as to carry out the Diploma Thesis in the third semester. The courses are credited with sixty (60) ECTS units, while the Diploma Thesis is credited with thirty (30) ECTS units.

The taught courses per semester, their title and relevant ECTS units for the Academic Year 2022-2023 are show in Section 3.

Furthermore, the Programme Coordination Committee's responsibility includes the announcement of postgraduate Diploma Thesis subjects on an annual basis, as well as positions in organizations, research centers etc., where the postgraduate students may carry out part of their thesis in collaboration with staff at these institutions.

After recommendation by the Committee of the Programme of Study and approval by the Senate, the study programme may be modified, and courses may be redistributed across the semesters.

The allocation of teaching in courses and the conduct of exercises or seminars, where appropriate, is made by the Programme Coordination Committee, according to the provisions in article 36 of law 4485/2017.

Teaching staff in the Programme can include those described in paragraphs 1, 2, 5 and 6 of article 36 of law 4485/2017.

Courses may be delivered by distance learning means at a percentage which may not exceed thirty five percent (35%) of the courses. It should be noted here that according to the new Law N. 4957/2022 it is allowed to extend this. As from the next academic year 2023-2024, it is expected that most of the courses will run online as well as in face-to-face mode.

Teaching and examination of courses takes place in the English or Greek language, while the postgraduate Diploma Thesis is written in English. The same applies for all examination, conducted research and overall teaching material.

### 6.3. Course attendance

Attendance of the courses and exercise (laboratory etc.) is mandatory.

Postgraduate students who register in the Programme are obliged to attend and be successfully examined in ten semester-long postgraduate courses of the Programme.

Postgraduate students are registered at the start of each semester and must register for selected courses of each semester.

Postgraduate students have the right to change up to two (2) electives during their studies, for which they must register and attend from the beginning of each semester, so that the required teaching hours are completed.

Postgraduate students may be assigned Teaching Assistance Duties in the context of educational needs of participating departments, which may indicatively include up to four (4) hours per week, and which is independent of any other obligations of the postgraduate student. For assignment, the prioritized preferences of the postgraduate student are considered. The acquisition of teaching experience is considered an integral part of the overall education of the postgraduate student. For Teaching Assistance Duties, postgraduate students can be hired by the University of Patras with an hourly contract and for which the cost is burdened by the University of Patras budget. Additionally, postgraduate students may be awarded grants, payments as part of work in research projects, payments as part of specialized scientific and technological service provision programmes and other payments according to standing legislation.

The maximum number of absences per course may not exceed 1/6<sup>th</sup> of lectures or exercises in the study programme. In the case that this limit is exceeded, the student is assumed to have not been taught the relevant course. All courses and laboratory exercises are conducted at the University of Patras.

# 6.4. Grading – Examinations – Appointment of Supervising Professor and Thesis Examination Committee

The performance in each course is evaluated by the teaching staff and is graded according to the standing grading scale for undergraduate students. Specifically, grades are ranged between zero (0) and ten (10) with a spacing of half a mark. The minimum passing grade is five (5).

The grades are stored by the teaching staff in the University of Patras student information system.

The corresponding Grading sheets are signed and sent to the Secretariat of the Electrical and Computer Engineering Department, which is responsible for the secretarial support, within ten (10) days after the end of each examination period.

Examination periods last two weeks. At each semester's examination period, only the courses taught in the relevant semester are examined. In case of failure in the examination, postgraduate students are allowed to repeat the

examination in the September period (only once) for subjects taught in any of the two semesters.

In case of failure to obtain a passing grade in a course or because of poor attendance, the postgraduate student must repeat the course.

In case of failure in a repeated course, the postgraduate student is removed from the programme.

In case of a second failure in the last course, with which a student might complete their obligations in the Programme, after application by the student, it may be permitted for a Three-members Examination Committee to re-examine the student. The Committee is appointed after decision by the Committee of the Programme of Study (based on the decision number 96/28-7-2016 of the Senate). The course teaching staff are excluded from the Committee.

For every postgraduate student in the Programme, the Committee of the Programme of Study appoints a Supervising Professor (SP) by the end of the spring semester. Supervising Professors are appointed after a written expression of interest by the student for collaboration with the relevant member of staff.

Upon the start of the third semester of studies in the Programme, and upon recommendation by the Coordination Committee, the Committee of the Programme of Study appoints the Three-members Examination Committee and the subject of the Diploma Thesis, after written expression of interest from each student, in which the student attaches a summary of the proposed topic. The Three-members Examination Committee is comprised of one member who must be the SP, must be a teaching member of staff of the Programme and who will preside over the Three-members Examination Committee. The knowledge subject of the other two members of the Three-members Examination Committee must be relevant to the topic of the proposed Diploma Thesis, and these members must be faculty members or researchers at grade A, B or C who possess a doctoral degree. The regulations for conducting a postgraduate Diploma Thesis are specified in article 7 of this regulation.

The approval of the postgraduate Diploma Thesis can be given by the consenting opinion of only two members of the Three-members Examination Committee, who may then also grade it.

In case of failure in the examination of the Thesis, the postgraduate student may be examined a second time, no earlier than three months and no later than six months from the date of the first examination. In the case of a second failure, the student is removed from the Programme, after decision by the Programme Coordination Committee.

For the award of IPSD-master's degree, a passing grade is required in all taught courses and postgraduate Diploma Thesis. If these requirements are not fulfilled within the relevant deadlines, the postgraduate student is given a simple certificate of successful attendance for those courses for which a passing grade was achieved and is removed from the Programme.

### Article 7. Postgraduate Diploma Thesis

For the preparation and writing of the Postgraduate Thesis, the terms of writing and publication of postgraduate theses of the University of Patras apply, as shown in the template, Appendix of this document.

The Diploma Thesis is the result of original research undertaking which is carried out under supervision of an experienced academic or a researcher in a Research Center and is awarded with 30 ECTS units. The Diploma Thesis is written in English.

### 7.1. Work on the Diploma Thesis

The Diploma Thesis is carried out in the third (final) semester. The work may start when a passing grade has been achieved in courses worth at least 36 ECTS units and has a duration of at least one academic semester.

At the start of the third semester, the postgraduate student, after obtaining approval from the supervising professor, must submit a document to the

Department Secretariat, announcing the thematic area of the Diploma Thesis, while the precise title is determined after the Diploma Thesis is completed.

Change of subject of the Diploma Thesis and/or supervising professor, may take place once and by the end of the third semester, after justified application of the student, and with the approval of the current supervising professor and the proposed supervising professor.

### 7.2. Writing up the Diploma Thesis

All issues related to the writing of the Diploma Thesis, such as, for example, language, fonts, instructions for the abstract, contents, structure and presentation of the Diploma Thesis, bibliography etc., are described in Annexes of the regulation.

### 7.3. Presentation of the Diploma Thesis

The presentation of the Diploma Thesis for the attainment of the IPSD-master's degree, is examined and approved by the Three-members Examination Committee, which is appointed by the Programme Coordination Committee, and takes place publicly. An announcement for the examination of the Diploma Thesis and the invitation to the Three-members Examination Committee takes place at least five (5) days before the date of presentation.

The meetings of the Three-members Examination Committee and the examination of postgraduate theses may take place throughout the academic year.

After the presentation of the Diploma Thesis and the answering of any related scientific questions, members of the public must withdraw and the process of grading and final assessment of the Diploma Thesis by the Three-members Examination Committee may begin.

In this case, the examination record which include the justification and grading of the Diploma Thesis are submitted by the Three-members Examination Committee president, to the Secretariat of the relevant department. The Threemembers Examination Committee also finalizes the title of the Diploma Thesis. The Diploma Thesis grade is submitted by the supervising professor in the University's student information system.

The Postgraduate thesis, if approved by the examination committee, must be posted in the digital repository of the University of Patras.

### Article 8. Miscellaneous obligations of Postgraduate Students

Postgraduate students, before the award of the IPSD-Master Degree, must return to the Department Secretariat, any provisions given to them upon registration in the IPSD-Master Degree (e.g. student ID, magnetic entry cards etc.).

### Article 9. Award and grading of the IPSD-Master Degree

### 9.1. Conditions for the award of the IPSD-master's degree

The postgraduate student completes and receives the IPSD-Master Degree when they have fulfilled all their obligations, as described in the internal regulation for the postgraduate studies of the University of Patras. Specifically:

- a) They must have a passing grade in all taught courses and the Diploma Thesis, i.e. to have attained the total ECTS required for the award of the IPSD-Master Degree, and which amount to ninety units (90 ECTS = 60 ECTS from taught courses + 30 ECTS from the Diploma Thesis).
- b) They must have obtained a certificate from the "Seminar for Health and Safety in the Workplace" according to the Coordination Committee's decision.
- c) They must have submitted the Diploma Thesis

The IPSD-master's degree cannot be awarded to any postgraduate students whose first study cycle degree from a foreign Higher Education Institution has not been recognized by the Hellenic NARIC, according to law 3328/2005.

### 9.2. Calculation of the IPSD-master's degree grade

The final grade of the IPSD-master's degree is calculated from the grades of the postgraduate courses and the grade of the Diploma Thesis assessment, according to the decision of the Programme Coordination Committee, as follows:

The calculation of the grade of the IPSD-master's degree, to the second decimal place, is obtained by multiplying the grade of each course by the number of the corresponding credit units (ECTS) of the course and the sum of the individual products is divided by the sum of the credit units (ECTS) of all courses, i.e.

IPSD-Master Degree grade = (course 1 grade x course 1 ECTS + course 2 grade \* course 2 ECTS + ... ) / total Programme ECTS (90 ECTS)

The IPSD-master's degree grade certifies the successful completion of the Programme. IPSD-master's degrees are awarded with a mention of their classification as Good, Very Good, Excellent, which correspond to grades in the following ranges:

- Excellent, between 8.50 and 10
- Very good, between 6.50 and 8.49
- Good, between 5 and 6.49

IPSD-master's degree awards are approved by the Programme Coordination Committee.

### 9.3. Required documentation

- 1) 2 CDs of the Diploma Thesis:
  - i. 1 CD is deposited in the Central Library. Upon submission, the Central Library provides the required certificate to be submitted to the Secretariat (NEMERTES).
  - ii. 1 CD and a printed copy of the Diploma Thesis is submitted to the Department of Electrical and Computer Engineering.
- 2) A declaration of law 1599/1986, where student declares:
  - i. That there are no standing obligations with the Student Union, Student Housing and Central Library

- ii. That the student has been informed about the legal consequences and the contents of the Programme regulation, the Department regulation, and the University of Patras internal regulation, and that the submitted Diploma Thesis with title "...." Has been carried out with the student's own responsibility under the conditions specified in the standing provisions and in the current Regulation.
- 3) Return of the student ID and entry card (if provided)
- 4) The examination record signed by the Three-members Examination Committee; in case they have not been submitted to the secretariat of the ECE department by the supervising professor
- 5) The grading sheet signed by the supervising professor; in case they have not been submitted to the secretariat of the ECE department by the supervising professor

### 9.4. Award Ceremony

IPSD-master's degree awards take place three times in an academic year, for all postgraduate programmes, at a special public ceremony, in which the Rector, the Heads of all Departments and all postgraduate students who have met the conditions for award, are present.

Prior to the date of the IPSD-master's degree award ceremony, the Secretariat of the Programme may provide a certificate of completion of study, in which the date of graduation is mentioned. The graduation date is the date of completion of all obligations by the postgraduate student.

### Article 10. Plagiarism

The postgraduate student is obliged to mention if they have used the work of others, using appropriate means. Plagiarism is considered a serious academic offence. Plagiarism is defined as the duplication of someone else's work, or use of works of other persons, whether published or not, without relevant reference to that work. The duplication of any supporting material, including the student's own previous work, without reference, can lead to a decision of removal of the student by the Programme Coordination Committee. In such cases, the Committe of the Programme of Study may decide upon the removal of a student

after they have been given the opportunity to submit, verbally or in writing, their views upon the issue.

Any offences or violations of academic code of conduct, is referred to the Programme Coordination Committee. Violations include plagiarism and all violations of regulations regarding intellectual property, by a postgraduate student, during the writing of the Diploma Thesis (Senate decision assembly no. 115/25.4.2017, document number 318/11394/27.4.2017 regarding "The issue of compulsory use of the Ephorus application").

### Article 11. Provisions to students

Postgraduate students have all the rights and provisions available to first cycle students (undergraduate), except the right to the free provision of course textbooks.

### 11.1. General provisions

Postgraduate students who do not have medical and hospital insurance are entitled to full such insurance in the national health system (ESY), with all expenses covered by the national social security organization (EFKA).

### 11.2. Student grants

The Programme regulation may include provisions for the award of grants or excellence awards for postgraduate students, subject to decision by the Programme Coordination Committee. Grants are awarded according to academic objective criteria (for example, students in full time study, mean grades in previous semester) or because of services by the student, and must be included in the approved Programme budget. The award criteria, student obligations and rights, are determined by Committee of the Programme of Study decision.

### 11.3. Tuition fees

There are no tuition fees for the Programme.

### Article 12. Issues related to the Diploma Supplement

The IPSD-Master Degree is accompanied by a diploma supplement in Greek and in English, which, amongst other information, contains information about the duration and content of the study programme, the skills and specialisation attained by the graduate, and their grades, according to the European Credit Transfer System (ECTS).

# Article 13. Administrative support – Material and Technical Infrastructure

Administrative support for the Programme is provided by the secretariat of the Electrical and Computer Engineering Department of the University of Patras. Administration and all related actions take place electronically. The Secretariat provides a single point of contact with the University of Patras for all parties.

The Departments contributing to the Programme provide building infrastructure with teaching rooms, sufficiently equipped teaching and research laboratories, as well as computing centers, for the needs of postgraduate study. Specifically, the Electrical and Computing Engineering department provides a fully equipped classroom with all required audiovisual equipment for the needs of the postgraduate courses. In the afternoon hours, where most postgraduate courses are scheduled, there is a significant number of free rooms in both departments participating in the Programme. All the necessary equipment for research and tuition are provided in the departments' laboratories and therefore all Programme needs are covered. Therefore the Programme will run in the available building infrastructure allocated to it, which sufficient to satisfactorily cover the needs for teaching and laboratory spaces.

### Article 14. Financing of the Programme

The Programme funding is provided by:

1) The Ministry of Education, Research and Religious Affairs budget

2) Donations, provisions, endowments, and all types of sponsorship by public or private entities, subject to the provisions of case a) of paragraph 1, article 14 of law 4270/2014.

### Article 15. Evaluation

At the end of each semester, an evaluation by the postgraduate students of each course and instructor takes place, according to the process and questionnaires approved by the University of Patras.

All issues not regulated in the present Regulation, will be regulated by the responsible bodies according to standing legislation.

## 3. Study Programme

**General Rules**: All courses correspond to a load of 6 ECTS each. The students are required to successfully complete 5 courses per academic semester for semesters 1 and 2 and the Master Thesis in semester 3 (90 ECTS total).

### **1st Semester**

1st Semester – compulsory courses

### HCI101 Cognitive Ergonomics

<u>Dimitrios Nathanael</u>, Assistant Professor, NTUA, School of Mechanical Engineering

<u>Christos Fidas</u>, Associate Professor, University of Patras, Dpt. of Electrical and Computer Engineering

Nicolas Marmaras, Ret. Professor, NTUA, School of Mechanical Engineering

HCI102 Research Methods

<u>Michalis Xenos</u>, Professor, University of Patras, Dpt. of Computer Engineering & Informatics

1st Semester – electives

HCI103 Interactive Technologies

<u>Nikolaos Avouris</u>, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Irene Mavrommati</u>, Associate Professor, Hellenic Open University, School of Applied Arts

<u>Christos Sintoris</u>, Teaching and Research Associate, University of Patras, Dpt. of Electrical and Computer Engineering

### HCI104 Computer Graphics and Virtual Reality

Konstantinos Moustakas, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

### HCI105 Artificial Intelligence

Konstantinos Moustakas, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Kyriakos Sgarbas</u>, Associate Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Pavlos Peppas</u>, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

HCI106 Collaboration Technologies

(The course for the academic year 2023-2024 is focused on gaming design and collaboration in gaming)

<u>Elina Roinioti</u>, Assistant Professor, Department of Performing and Digital Arts, University of Peloponnese

<u>Christos Sintoris</u>, Teaching and Research Associate, University of Patras, Dpt. of Electrical and Computer Engineering

### HCI109 Information Visualization

Konstantinos Chorianopoulos, Associate Professor, Ionian University, Dpt. of Informatics

<u>Christos Fidas</u>, Associate Professor, University of Patras, Dpt. of Electrical and Computer Engineering

HCI110 Software Quality

<u>Michalis Xenos</u>, Professor, University of Patras, Dpt. of Computer Engineering & Informatics HCI1xx Other elective courses

Up to two elective courses that are offered in other Masters Programs of the University of Patras

### 2nd Semester

2nd Semester – compulsory courses

HCI201 Design and Evaluation of Interactive Systems

<u>Michalis Xenos</u>, Professor, University of Patras, Dpt. of Computer Engineering & Informatics

<u>Maria Rigou</u>, Assistant Professor, Dpt. of Management Science and Technology

2nd Semester – electives

HCI202 Design of Web Applications

<u>Nikolaos Avouris</u>, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Christos Sintoris</u>, Teaching and Research Associate, University of Patras, Dpt. of Electrical and Computer Engineering

HCI203 Speech and Natural Language Processing

<u>Nikos Fakotakis</u>, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

Kyriakos Sgarbas, Associate Professor, University of Patras, Dpt. of Electrical and Computer Engineering

HCI205 Ubiquitous Computing

<u>Christos Fidas</u>, Associate Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Andreas Komninos</u>, Assistant Professor, University of Patras, Dpt. of Computer Engineering & Informatics

HCI206 Creative Design Lab

<u>Irene Mavrommati</u>, Associate Professor, Hellenic Open University, School of Applied Arts

HCI207 Front End Web Programming

<u>Nikolaos Avouris</u>, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Christos Sintoris</u>, Teaching and Research Associate, University of Patras, Dpt. of Electrical and Computer Engineering

HCI208 Design of Location-based applications

<u>Nikolaos Avouris</u>, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Christos Sintoris</u>, Teaching and Research Associate, University of Patras, Dpt. of Electrical and Computer Engineering

HCI209 Introduction to Human-Robot Interaction

<u>Michalis Xenos</u>, Professor, University of Patras, Dpt. of Computer Engineering & Informatics

<u>Evangelos Dermatas</u>, Associate Professor, , Dpt. of Computer Engineering & Informatics

<u>Andreas Komninos</u>, Assistant Professor, University of Patras, Dpt. of Computer Engineering & Informatics

HCI210 Statistical Methods in Human-Computer Interaction

<u>Sophia Daskalaki</u>, Assistant Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Sonia Malefaki</u>, Assistant Professor, University of Patras, Dpt. of Mechanical and Aeronautics Engineering

HCI211 Brain-Computer Interaction

<u>Christos Fidas</u>, Associate Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Andreas Komninos</u>, Assistant Professor, University of Patras, Dpt. of Computer Engineering & Informatics

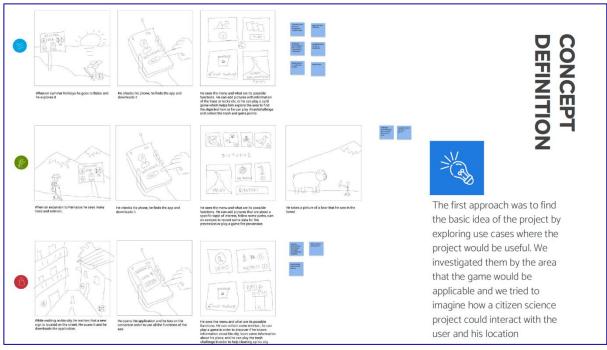
HCI2xx Other elective courses

Up to two elective courses that are offered in other Masters Programs of the University of Patras

### **3rd Semester**

HCI301 Master Thesis

The Master Thesis is undertaken during the third semester of studies, under the supervision of one of the faculty members of participating departments. A list of areas of research will be announced. Students will be encouraged to do part of their thesis work in industry or collaborating institutions in Greece or abroad. The Thesis is presented publicly and examined and approved by a three-member examination board, chaired by the Thesis supervisor.



Example of project work, A. Zogza Concept Design Project 2019-2020

# 4. List of faculty members

The faculty that are involved in this Postgraduate Program come from various Departments of the University of Patras as well as other Greek Universities.

<u>Nicolas Marmaras</u>, Ret. Professor, NTUA, School of Mechanical Engineering

<u>Dimitrios Nathanael</u>, Assistant Professor, NTUA, School of Mechanical Engineering

<u>Christos Fidas</u>, Assistant Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Michalis Xenos</u>, Professor, University of Patras, Dpt. of Computer Engineering & Informatics

<u>Nikolaos Avouris</u>, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

Irene Mavrommati, Associate Professor, Hellenic Open University, School of Applied Arts <u>Christos Sintoris</u>, Teaching and Research Associate, University of Patras, Dpt. of Electrical and Computer Engineering

Konstantinos Moustakas, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Kyriakos Sgarbas</u>, Associate Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Pavlos Peppas</u>, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Elina Roinioti</u>, Assistant Professor, Department of Performing and Digital Arts, University of Peloponnese

<u>Konstantinos Chorianopoulos</u>, Assistant Professor, Ionian University, Dpt. of Informatics

Maria Rigou, Assistant Professor, Dpt. of Management Science and Technology

<u>Nikos Fakotakis</u>, Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Andreas Komninos</u>, Assistant Professor, University of Patras, Dpt. of Computer Engineering & Informatics

<u>Evangelos Dermatas</u>, Associate Professor, University of Patras, Dpt. of Computer Engineering & Informatics

<u>Sophia Daskalaki</u>, Assistant Professor, University of Patras, Dpt. of Electrical and Computer Engineering

<u>Sonia Malefaki</u>, Assistant Professor, University of Patras, Dpt. of Mechanical and Aeronautics Engineering

# 5. Academic calendar 2023-24

The academic calendar, as announced by the <u>University of Patras</u> is as follows:

# 1st (winter) semester

classes between October  $2^{nd}$  2023 and January  $12^{th}$  2024

### 2nd (spring) semester

classes between February  $19^{th}\,2024$  and May  $31^{st}\,2024$ 

#### Last day for exams/Master Thesis presentation:

- September exams period: 30<sup>th</sup> September 30<sup>th</sup> 2024
- February exams period: January 22<sup>nd</sup> 2024 until February 9<sup>th</sup> 2024
- June exams period: June 10<sup>th</sup> 2024 until June 28<sup>th</sup> 2024

# 6. Examples of Students' work

# Best Paper Awards based on Students' Master Thesis

Although the Master in Human-Computer Interaction is running for just a few years, so far many student works on their master thesis have resulted in publications in international journals and conferences, while 3 of these have gained a **best paper award**! Further details for these works (listed alphabetically):

- The work of Evangelou Semira Maria (graduated 2021) won the best paper award in the IEEE EDUCON 2021, held in Vienna Austria, June 2021, for the paper entitled "A Serious Game for Mobile Phones used in a Software Engineering Course: Usability Evaluation and Educational Effectiveness". The article is available <u>here</u>.
- The work of Kounalaki Maria (graduated 2023) won the best paper award in the CHIGREECE' 23, held in Athens Greece September 2023, for the paper entitled "Pseudo-haptic and Self-haptic Feedback During VR Text Entry". The article is available <u>here</u>.
- The work of Zarkadoula Kallirroi (graduated 2022) won the best paper award in the IEEE EDUCON 2022, held in Tunis Tunisia, May 2022, for the paper entitled "Evaluating Usability and Educational Effectiveness of a Serious Game for Programmers Using Alternative Interfaces and Types of Activities". The article is available <u>here</u>.

# Location-based experiences

The following location-based experiences have been designed and developed as group projects for the 2019-2020 HCI Master's course "HCI208: Design of Location-based applications". All these experiences are developed through the augmented reality (AR) software platform, Taleblazer.

To play the games, download the Taleblazer app on your mobile device and enter each game's "game code".

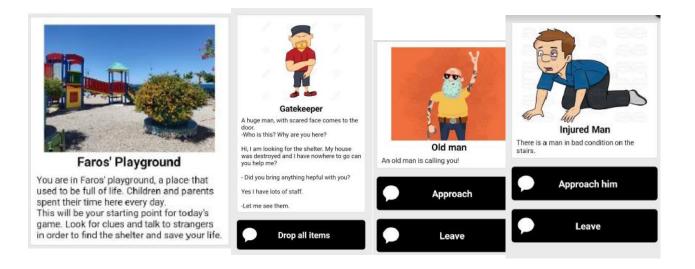
Examples of student projects are:

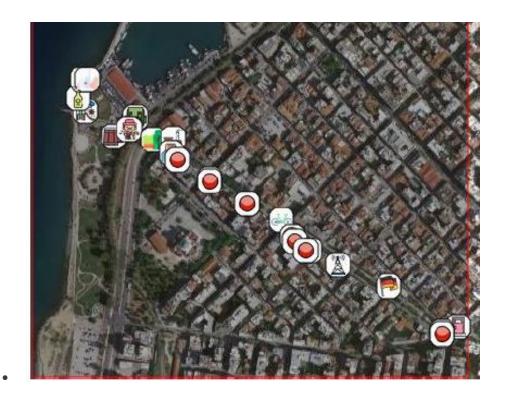
# **Apocalypse Now!**

**Player age**: 18+ **Game Location**: The game is located in the area between the "Faros" park and the stairs of "Trion Navarchon" in downtown Patras area.

*Game Description:* "Apocalypse Now!" is a survival game where the player must follow instructions and collect useful items in order to successfully reach the endpoint and complete the game, feeling the thrill of battling for survival. The aim of the game the players with emotions of agony and adrenaline rush by motivating them with powerful storytelling relative to the current era. In the end, the player gets the reward of finding the shelter creating emotions, similar to a horror movie with happy ending. Moreover, the game aims to encourage the exploration of the city by combining important places with bumping points and in the end presents a learning aspect about an important and not well known prewar historic bombing shelter. Other side goals are the exercise aspect because the player has to walk a distance of 1.2 km in order to complete the game and an ethical aspect, where the player is called to help fictional characters in need. The overall game time is intended to be about 25 to 30 minutes.

Estimated duration: 25 – 30 mins Created by: Georgakopoulos Theodoros



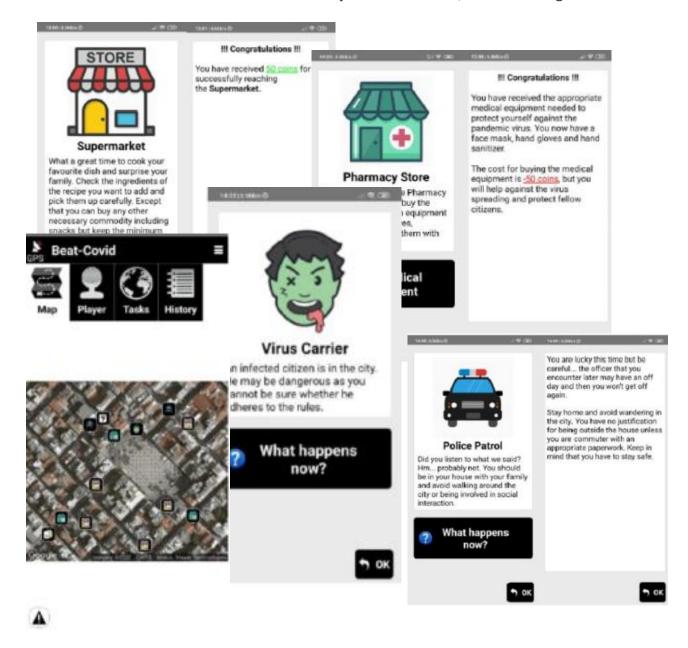


# **BEAT-COVID**

Player age: 18+ Game Location: The game is located in the centre of Patras

*Game Description:* "Beat-COVID" is an adventure activity, helping users exercise their body through walking around in the city (exergame) and explore the city by visiting locations they might have never visited before. Also, it is inspired by the real-

life events of the COVID-19 pandemic virus and will support an infinite number of players. The game adds suspense by considering real and fake positions for the police patrols and the infected citizens. By using such traps/bluffs, users can never know when they will actually be caught by the police or be infected unless they exchange their available coins for extra tips. Additionally, the game has been structured in such a way that offers multiple scenarios, adding up to the complexity of the game (e.g. user categorization, coins, tips, and collectibles).



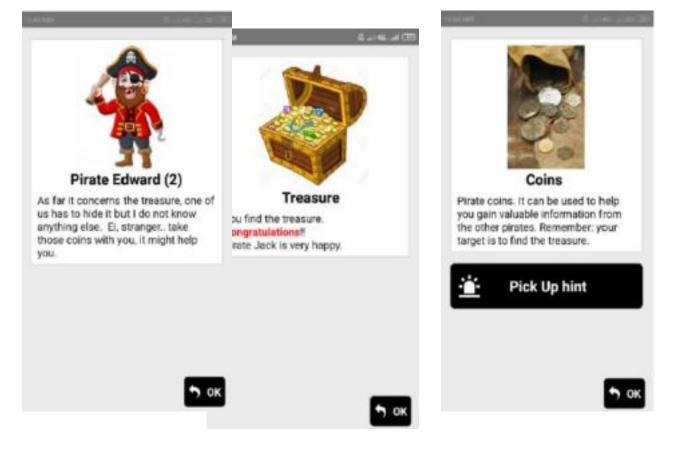
#### **Estimated duration:** 20 – 40 mins **Created by:** Zarkadoula Iro, Michos Evangelos

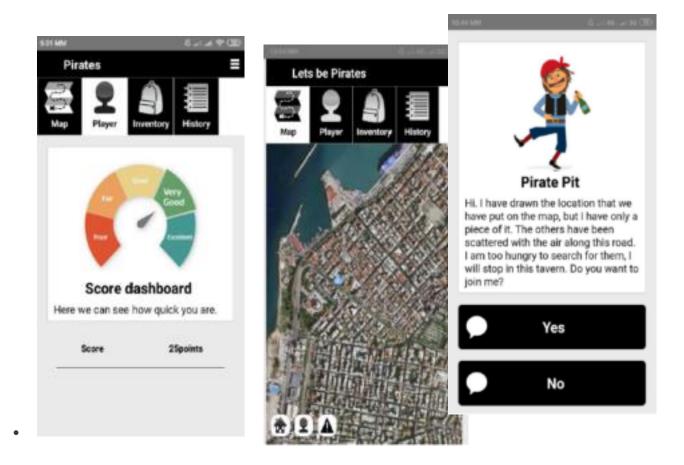
# Let's be Pirates

#### Player age: 12+ Game Location: The game is located in the Marina of Patras

*Game Description:* "Let's be Pirates" is a game about pirates that during the Battle of Nafpaktos, were caught up in a storm and travel through time in the city of Patras, 2020. It is a narrative treasure hunting game that aims to entertain and educates people, especially children. The players in order to find the treasure must interact with characters (e.g sailors, pirates) and collect clues. Those characters are placed in spots of historical value and other points of interest so that the players learn details about these spots. With the end of the game kids-regardless of whether they have managed to find the treasure or not-will have learned some things about a specific area of their city and historical facts that probably they have not learn from school.

#### Estimated duration: 35-45 Created by: Balaskas Stefanos, Koutroumani Maria





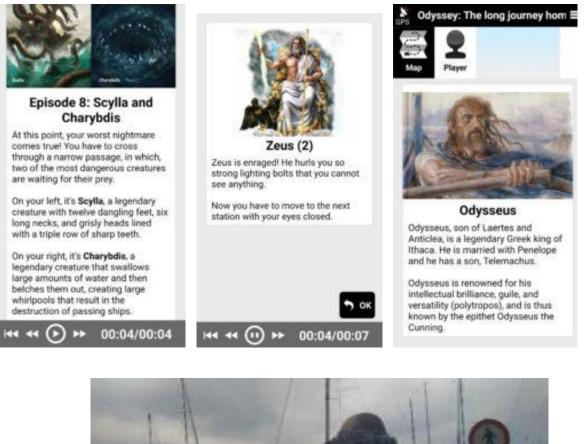
# **Odyssey: The long journey home**

#### Player age: 13+ Game Location: The game is located in the Marina of Patras

*Game Description:* "Odyssey: The Long Journey Home" is a location-based narrative decision-making game. The story of the game is inspired by Odyssey and narrates some of the adventures of Odysseus on his way back home (e.g. Lotus-Eaters, Sirens, Scylla, and Charybdis). The purpose of this game for every player is to live these adventures through the eyes of Odysseus and make the best decisions in order to reach as fast as he can in the final station, Ithaca. The player has to visit seven locations (stations) in which he has to make the best decision in order to reach as fast as he can to the last location. If the player makes the best option in a location, he earns 10 points and he can move directly to the next station. Each of these 10 points corresponds to Odysseus's virtues that came up after his decisions (Determination, Intelligence, Strategy). The player who will gather all these points/virtues, regardless of the time spent, he can consider himself as "Resourceful", like Odysseus. In the end, arriving at the last location, the one with the best score and the best time is

the winner of the game. Furthermore, a coordinator is needed to observe the gameplay, avoiding cheats, and provide safety to the players.

#### *Estimated duration:* 20 – 25 mins *Created by:* Gkoumas Stamatios



User Experience Study

# 7. Annexes

# Annex A

Documents required for the application to enroll in the HCI-Master Programme The candidate selection process requires the submission of the following documentation:

- 1) Curriculum Vitae
- 2) Copies of Study Certificates
- 3) Academic transcript for the candidate's first degree
- 4) Statement of interest regarding the Programme's scientific discipline
- 5) Copies of English language qualifications (a minimum B2 level or greater) and/or a second foreign language
- 6) A minimum of two reference letters
- 7) Copies of research publications and proof of professional experience related to the Programme scientific discipline (if any)
- 8) Copy of the candidate's national identity card or passport
- 9) A national identity card type photograph

Holders of degrees from foreign Higher Education Institutions may submit an application for postgraduate study, and in case their application is accepted, they must submit copy of their certificates and degrees, translated to Greek and notarized by the local consulate. For graduation, a certificate of recognition and equivalence of their degrees from the Hellenic NARIC is also required. Registration must be completed before the start of teaching in the Winter semester.

# Annex B

Instructions for the writing of Postgraduate Diploma Theses The thesis document is typed using DIN A4 (21x29.7cm) white paper, using Times New Roman 14pt fonts or equivalent, with fully justified text. All elements of the Diploma Thesis (text, tables, figures etc.) are positioned with a top and left margin of 3cm, and bottom and right margin of 2.5cm. Pages in the sections between Acknowledgements and Acronyms are numbered with latin numbers (i, ii, iii, ...) positioned in the bottom center of the page. All other pages are numbered using Arab numerals (1, 2, 3 ...) ...) positioned in the bottom centered of the page.

Cover page example

MSc program
"Human-Computer Interaction"
MSc Thesis
of Xxxxxxxxxxxxxx
"first degree title"
A.M.: XXXXXXXXXXXXXXXXXXX
Title:
×xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Supervisor:
Professor XXXXXXXXX XXXXXXXX
Thesis Number: (same as A M )
Thesis Number: (same as A.M.) Patras, date

#### Cover page inner section

University of Patras, Electrical and Computer Engineering Department [Author name] © [Year] – All rights reserved The thesis reports original material developed by xxxxx and does not violate Intellectual Property Rights in any way.

Reuse of existing material is properly referenced, while potential use of figures, graphs, etc is being reproduced after receiving the respective license from the IPR holder

### Thesis structure

- Acknowledgements
- Abstract
- Extended Abstract (in Greek)
- Acronyms
- Thesis chapters (main body)
- References
- Annexes

## **Detailed instructions**

#### Acknowledgements

The student acknowledges the academic unit where the Diploma Thesis was carried out, as well as any persons who contributed substantially in the elaboration of the Diploma Thesis (e.g. supervising professor, laboratory staff, other organisations and their personnel). This section should be no longer than a single page.

#### Abstract

The abstract consists of three parts. In the first part, the scientific problem studied by the Diploma Thesis is presented, together with the methodology used to study it. In the second part, a summary of each chapter of the thesis is presented (one paragraph per chapter). In the third part, the main findings as well as possible applications and further directions are summarized. The abstract is a crucial part of the thesis, since it must highlight the quality of the work, its novelty and other noteworthy aspects, so that the reader may

understand the scientific problem and the solution presented in the thesis. A length between one and three pages is recommended for the abstract.

### Acronyms

Two columns are used for the acronyms. In the first column, all acronyms used in the thesis are presented in alphabetic order and in the second column, their explanation in English.

# Thesis Chapters (main body)

The main body of the theisis is divided in chapters and subsections, numbered sequentially, using a numbering system of up to four levels with Arab numerals. Chapters always begin in a new page. Chapter headings are presented in bold type of at least 18pt font size capitals, leaving at least three blank lines before the heading and two blank lines after them. First level subheadings are presented in bold type and 14pt font size capitals, with one blank line before and after. Chapter headings and first level subheadings may be shaded. Second level subheadings are presented in bold type 14pt font size lower-case capitals, with one blank line before and after, as per the following example: [missing]

Mathematical symbols in equations are always defined at the location where they are first presented, if necessary, and a table of symbols is included immediately following the acronym section. Reference to mathematical equations in the text takes place in a shorthand form, e.g. "... eq. (4.53)...".

## Figures – Illustrations – Tables

All figures, illustrations and tables must be numbered and captioned, using italic 12pt size fonts. By exception, small tables (e.g. only a few rows) which are referred to only once in the text, do not need to comply with this rule. They must be placed immediately following their mention. Table numbering takes place using Arab numerals with two field, as mentioned in the section regarding mathematical equations. Independent numbering is used for figures, illustrations, and tables. Captions are positioned under the figures or illustrations, while for tables they are positioned above, always maintaining a spacing of one blank line between the caption and its object. Caption numbers are presented in bold type. If the caption is no longer than one line, then it is centered, else it is centered with a single-line spacing, as per the example: [missing]

Tables, illustrations and figures are positioned in their final location, centered and immediately following the text where they are mentioned for the first time, preferably at the top or bottom of a page. They are separated from the text by a single line. If a table is longer than one page, its header row is repeated in the beginning of the new page. An example table follows: *Table 3.1 Typical line parameters* 

Line type	R (Ω/Km)	X (Ω/Km)	$I_{N}$ (A)	X/R
XT	0.642	0.083	142	0.129
MT	0.161	0.190	396	1.180
ΥT	0.060	0.191	580	3.180

It is recommended that figures and illustrations are of high quality and suitable for black-and-white reproduction. Lettering in figures and tables may be smaller and different compared to the regular body text font size (Times New Roman, 14pt), under the condition that they remain legible upon reproduction. Reference to tables, figures and illustrations may be made in shorthand form in the text, eg. "...Fig. 2.1...", "... Tab. 3.1..." or "...III. 1.3... ".

## **References-Bibliography**

References are presented according to the following examples:

## Books, Theses or Reports

E. Hossain, Z. Han and H. Vincent, "Smart Grid Communications and Networking", Cambridge University Press, 2012, ISBN: 9781107014138, 9781139013468.

### Journal article

E. Hossain, Z. Han and H. Vincent, "Proposed Terms and Definitions for FACTS", IEEE Trans. on Power Delivery, Vol. 12, No. 4, October 1997, pp. 1848-1853.

### ■ Article in Conference Proceedings

I. D. Bouloumpasis, T. Vrionis and K. G. Georgakas, "A Method for Power Conditioning with Harmonic Reduction in Microgrids", International Conference on Renewable Energies and Power Quality (ICREPQ'14), Cordoba (Spain), 8-10 April, 2014.

# Annex C

Regulations for the writing and publicizing of graduate, postgraduate and doctoral theses at the University of Patras

1. Every volume containing a thesis text must legibly bear at the back of the title page the following text:

University of Patras, [Department] [Author name] © [Year] – All rights reserved

- 2. The postgraduate student, using the appropriate thesis deposition form of the Nemertes Institutional Repository, grants the non-exclusive right to disseminate the thesis through the Internet for the purpose of systematic and complete collection of research outputs at the University of Patras, recording, transparency and advancement of research.
- 3. Every postgraduate student conducting a postgraduate thesis at a department of the University of Patras is assumed to have been informed and to accept the following:
  - The entirety of the thesis consists of original work, produced by the author, and does not violate other authors' rights in any way.

- If the thesis contains material which is not the author's original work, this material is clearly marked and referenced within the thesis text as the work of another author, making clear the identity of such third parties, while at the same time the author confirms that in the case that third-party figures, photographs, illustrations etc. have been used, a non-restrictive permission for the inclusion and subsequent publication of this material has been granted by the intellectual property rights holder of the material.
- The postgraduate student bears exclusive responsibility for the fair use of third-party material used and is solely responsible for any consequences arising from such use. The student acknowledges that the University of Patras bears no responsibility that may arise from negligent consideration of intellectual property rights.
- The writing, submission and dissemination of the thesis is not hindered by the granting of the author's intellectual property rights to third parties, e.g. publishers of monographs or scientific journals, at any time before or after the publication of the thesis, and the author acknowledges that the University of Patras does not waive its right to disseminate the content of the thesis using any means it deems appropriate.
- For the reasons mentioned above, at the time of submission of the thesis, the postgraduate student submits a declaration in which they acknowledge having been informed and being aware of legal consequences and the consequences set out by the Programme study regulation, the department regulation and the internal regulation of the University of Patras, as well as that the work in the submitted thesis titled "...." has been carried out with the student's own responsibility, adhering to the conditions set out in the standing provisions and the current regulation.
- 4. The theses are made available in the Institutional Repository no later than twelve (12) months later. The Coordinating Committee of an Programme or the Three-membersMentoring Committee can ask, after justified opinion of the Supervising Professor and the postgraduate student, the temporary exemption of the thesis from publication in the Institutional Repository, for extraordinary reasons related to the further progress and

evolution of the scientific activity, to protect the interests of the [student], or other physical persons, organisations, companies etc. The period of exemption may not be longer than thirty six (36) months, in the absence of other legal obstructions. It is noted that the deposition of the thesis takes place after its successful presentation, according to standing provisions, and before the awarding of the degree, but that its availability is regulated by the Library according to the relevant request.

Uploading of the thesis at the Library and Nemertes institutional repository Uploading the final version of the Diploma Thesis in the Library and Information Center's (LIC) public digital repository, according to the Library and Information Center internal regulation (Senate assembly no 382/20.04.05, revised at 59/04.06.15) is mandatory for all University of Patras postgraduate students. Doctoral students must also submit a printed copy. After the thesis uploading, the LIC provides students the certificate required for the Secretariat of their Department.

#### Annex E

Sample announcement for the examination of a Diploma Thesis

ANNOUNCEMENT				
The public presentation of the Postgraduate Diploma Thesis by				
Mr./I	Mrs./Ms ,			
For the Inter-departmental Programme of Postgraduate Studies in "Human- Computer Interaction"				
Titled:				
""				
Will take place on				
Day Date and time				
At Room Of the Department Of the University of Patras				
The Programme Coordinator	The Supervising Professor			