University of Engineering and Technology
School of Computer Science
Syllabus of Course – Academic Period 2017-I

1. **Code and Name:** GH1002. Art and Technology
2. **Credits:** 1
3. **Hours of theory and Lab:** 2 HP;
4. **Professor(s)**
   Meetings after coordination with the professor
5. **Bibliography**

[J12] Maeda J. *Processing: A Programming Handbook for Visual Designers and Artists*. Cambridge: The MIT Press, 2012.

[S02] Wilson. S. *Intersections of Art, Science and Technology*. Cambridge: The MIT Press, 2002.

6. **Information about the course**

   (a) **Brief description about the course** The course seeks to give a global, historical and critical vision of the transformations and synergies of contemporary art. Where students approach two components of contemporary art and design: interdisciplinary practices and points of contact between the arts and the technological and engineering processes.

   (b) **Prerrequisites:**

   (c) **Type of Course:** Mandatory

7. **Competences**

   - Develop the ability to analyze information.
   - Develop the ability to interpret information.
   - Develop the ability to work as a team.
   - Developing Oral communication skills.
   - Recognize the need for lifelong learning.

8. **Contribution to Outcomes**

   d) An ability to function on multidisciplinary teams. (**Usage**)

   e) Understand correctly the professional, ethical, legal, security and social implications of the profession. (**Usage**)

   f) An ability to communicate effectively. (**Usage**)

   n) Apply knowledge of the humanities in their professional work. (**Usage**)

   o) Improve the conditions of society by putting technology at the service of the human being. (**Usage**)

9. **Competences (IEEE)**

   C10. Understanding of the impact on individuals, organizations, and society of deploying technological solutions and interventions.⇒ **Outcome d,n,o**

   C17. Ability to properly express in oral and written media as expected from a university graduate. ⇒ **Outcome f**

   C18. Ability to participate actively and as a member of a team. .⇒ **Outcome f**

C21. Understanding the professional, legal, security, political, humanistic, environmental, cultural and ethical issues. ⇒ **Outcome e**

10. List of topics

1. Arts and Technology.
2. Digital Art
3. Prototyping, analysis and creation

11. Methodology and Evaluation
Methodology:

Theory Sessions:
The development of the theoretical sessions is focused on the student, through his active participation, solving problems related to the course with the individual contributions and discussing real cases of the industry. The students will develop throughout the course a project of application of the tools received in a company.

Lab Sessions:
Practical sessions are held in the laboratory. Laboratory practices are performed in teams to strengthen their communication. At the beginning of each laboratory the development of the practice is explained and at the end the main conclusions of the activity in group form are highlighted.

Oral Presentations :
Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

Reading:
Throughout the course different readings are provided, which are evaluated. The average of the notes in the readings is considered as the mark of a qualified practice. The use of the UTEC Online virtual campus allows each student to access the course information, and interact outside the classroom with the teacher and with the other students.
Evaluation System:
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12. Content

Unit 1: Arts and Technology. (12)	
Competences Expected: 4	
Learning Outcomes	**Topics**
• Promote the interest in learn about current issues of Peruvian society and the world.	• What is art and what is it for? • The artistic discourse: identity, territory, politics and society.
Readings : [S02]	

Unit 2: Digital Art (24)	
Competences Expected: 3	
Learning Outcomes	**Topics**
• Development of skills such as: creativity, critical thinking, observation and synthesis.	• Generative Art. • Net Art. • Virtual Reality.
Readings : [J12]	

Unit 3: Prototyping, analysis and creation (24)	
Competences Expected: 3	
Learning Outcomes	**Topics**
• Students understand the importance and effectiveness of teamwork, in both academic and professional life. During the semester, students perform group and individual activities whose common goal is the generation of a project that links concepts of art, technology and engineering.	• Digital Manufacturing • Intervention: Action and public space • Presentation: Montage and portafolio
Readings : [S02]	