

ECTS Information Package: Degree Programme

Bachelor's degree in

# DESIGN AND GRAPHIC ARTS TECHNOLOGY

www.gri.ipt.pt







### **A - General Description**

Programme Title - Design e Tecnologia das Artes Gráficas

Qualification awarded - Bachelor's degree in Design and Graphic Arts Technology

Level of qualification - First-Cycle degree, ISCED Level 5, EQF Level 6

#### Specific admission requirements

#### General

In order to be eligible to this bachelor's degree, students must hold the high-school diploma or legally equivalent qualification. Application can also be made through the following special entry routes:

- Students coming from the Portuguese education system through re-admission, degree change and transfer schemes;
- Holders of a Foundation Course Diploma (CET);
- Adults aged more than 23 who have passed tailor-made examinations intended to assess their ability to pursue higher education studies;
- Holders of Intermediary or Graduate degree diplomas;
- Students coming from foreign higher education.

#### **Specific**

To be accepted for entry in the bachelor's degree in Design and Graphic Arts Technology one of the following national entry examinations is required:

Drawing (03); Descriptive Geometry (10); History of Culture and Arts (12)

Regional Preferences: (30% of total vacancies) Lisbon, Leiria, Portalegre, Santarém and Setúbal.



#### Specific arrangements for recognition of prior learning (formal, non-formal and informal)

#### General

The policy and procedures for accreditation of prior learning are specified in the Regulations for the Recognition and Validation of Qualifications and skills of Escola Superior de ESTT-IPT available at http://webmanager.ipt.pt/mgallery/default.asp?obj=4536

**Specific** 

Not applicable.

#### Qualification requirements and regulations:

180 ECTS credits distributed across 6 curricular semesters (3 years), each with 40 weeks of full-time study (20 weeks per semester).

Total study hours per year: 1620 (1 ECTS credit = 27 study hours). The course structure comprises 6 compulsory modules per semester.

#### **Profile of the program:**

The Design and Graphic Arts Technology programme is designed according to a multifaceted consistent profile and covers a wide range of subjects from graphic technologies and communication design. It aims to deliver designers and top managers for institutions or enterprises involved in the design, production, management and research of graphic objects. Understanding technologies and graphic processes, management systems and methods and budgeting, information and communication technologies and multimedia is a crucial condition for the designer and graphic technician profile inherent to this academic cycle. This programme was designed so as to facilitate access, not only to the labour world, but also to second-cycle programmes of study, namely the Master?s degree in Editorial Technologies from ESTT.

Instituto Politécnico de Tomar 7-06-2021 3/50



#### **Key learning outcomes:**

On completion of the bachelor's degree in Design and Graphic Arts Technology the students must have acquire the following skills:

#### Academic skills:

- Communication and representation abilities in such areas as traditional, digital, and multimedia graphics.
- Be familiar with project and work organisation methods.
- Have general knowledge of graphic culture, social sciences and exact sciences.
- Have a good command of graphic technologies.
- Have consolidated knowledge of production planning and organisation as well as quality control and management.
- Have analysis and synthesis skills in the context of communication design .
- Have professional development skills.

#### Instrumental skills:

- Understand and be able to use the various technological tools and desktop publishing software as well as software for image processing, vectorial drawing, webdesign and multimedia.
- Be able to use pre-press, press and finishing materials, processes and techniques.
- Have management and budgetary skills.

#### Interpersonal skills:

- Have interpersonal relationships and multidisciplinary work skills.
- Have leadership and cooperation abilities.
- Have creativity and initiative.
- Be able to join any graphic and design company versatility and adaptability.

#### Systemic skills:

- Have a global overview of design and graphic technologies and the possibilities in terms of acting strategies.
- Develop technical and creative thinking and be capable of innovating and furthering knowledge.

#### Occupational profiles of graduates with examples:

- professionals for graphic companies: top management positions in sectors such as production, commercial, quality, planning, budgets and stocks.
- professionals for graphic design related areas: communication designer, webdesigner and multimedia designer.

#### **Access to further studies:**

The licenciado degree in Design and Graphic Arts Technologies allows access to postgraduate programmes according to the admission regulations established for those programmes. At the School of Technology Tomar (ESTT) this programme gives access to the Master's in Editorial Design.



### Course structure diagram with credits

| Course code | Course Title                               | Year | Semester   | Credits |
|-------------|--|------|------------|---------|
| 964442      | Desktop Publishing                         | 1    | S1         | 5.5     |
| 96441       | Drawing                                    | 1    | S1         | 3       |
| 964443      | Graphic Technology                         | 1    | S1         | 7       |
| 964459      | History of Graphic Communication Design I  | 1    | S1         | 4       |
| 964413      | Image Processing                           | 1    | S1         | 5       |
| 96443       | Psychology of Visual Perception            | 1    | S1         | 5.5     |
| 96449       | Applied Chemistry                          | 1    | S2         | 5       |
| 964411      | Graphic Design I                           | 1    | S2         | 6       |
| 96448       | Image Analysis                             | 1    | S2         | 4.5     |
| 964444      | Photography                                | 1    | S2         | 4.5     |
| 964445      | Prepress                                   | 1    | S2         | 7       |
| 964460      | Typography                                 | 1    | S2         | 3       |
| 964437      | Communication Ergonomics                   | 2    | S1         | 4       |
| 964416      | Graphic Design II                          | 2    | S1         | 6       |
| 964461      | History of Graphic Communication Design II | 2    | S1         | 4.5     |
| 964440      | Marketing                                  | 2    | S1         | 4       |
| 964446      | Printing - offset I                        | 2    | S1         | 7       |
| 964414      | Production Management                      | 2    | S1         | 4.5     |
| 964447      | Final Artwork                              | 2    | S2         | 3       |
| 964422      | Graphic Design III                         | 2    | S2         | 6       |
| 964420      | Multimedia Design I                        | 2    | S2         | 5       |
| 964421      | Packaging and Processing                   | 2    | S2         | 5       |
| 964448      | Printing - Offset II and Pad Printing      | 2    | S2         | 6       |
| 964419      | Quality Control                            | 2    | S2         | 5       |
| 964450      | Digital Printing                           | 3    | <b>S</b> 1 | 3       |
| 964426      | Graphic Design IV                          | 3    | S1         | 6       |
| 964427      | Multimedia Design II                       | 3    | S1         | 5       |
| 964452      | Postpress                                  | 3    | S1         | 6       |
| 964449      | Quality Management                         | 3    | S1         | 4       |



### Course structure diagram with credits (cont.)

| Course code | Course Title                                  | Year | Semester | Credits |
|-------------|---|------|----------|---------|
| 964451      | Screenprinting                                | 3    | S1       | 6       |
| 964462      | Binding and Conservation of Graphic Documents | 3    | S2       | 5       |
| 964456      | Final Project                                 | 3    | S2       | 7.5     |
| 964455      | Graphic Budgeting                             | 3    | S2       | 5       |
| 964454      | Management and Strategy                       | 3    | S2       | 4.5     |
| 964431      | Multimedia Design III                         | 3    | S2       | 5       |
| 964433      | Organizational Behaviour                      | 3    | S2       | 3       |



#### Examination regulations, assessment and grading

#### General

General assessment rules are in line with the Portuguese law and described in the Academic Regulations of ESTT-IPT available at http://webmanager.ipt.pt/mgallery/default.asp?obj=4538.

The licenciado degree is awarded a final grade between 10 and 20 within a 0/20 scale as well as its equivalent in the European grading scale.

#### **Specific**

Not applicable.

#### **Graduation requirements:**

Completion of the program requires successful completion of all its constituent modules.

#### Mode of study:

Full- or part-time.

#### Program director or equivalente

<u>Director</u>: Maria João Bom Mendes dos Santos <u>Erasmus coordinator</u>: Rui Miguel Sardinha Proença

ECTS coordinator: Paula Alexandra Costa Leite Pinto Pereira



| Course unit title                                    | Desktop Publishing  |
|--|---|
| Course unit code                                     | 964442  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | First Year  |
| Semester/Trimester when the course unit is delivered | First Semester  |
| Number of ECTS credits allocated                     | 5.5   |
| Name of Lecturer(s)                                  | Rui Miguel Sardinha Proença<br>Regina Aparecida Delfino   |
| Learning outcomes of the course unit                 | Students should learn the key tools and concepts in the field of electronic text processing and vector drawing and be able to apply them to graphic design and technology.  |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable  |
| Recommended optional programme componentes           | Not applicable  |
| Course contentes                                     | - Introduction to Informatics Concepts of hardware and software Digital imaging; distinction between bitmap and vector images Edition and production of vector images (introduction to specific software) - Colour modes, models and systems  |
| Recommended or required<br>Reading                   | <ul> <li>- ANDRADE, M.(2016). Adobe Illustrator CC. São Paulo: Senac</li> <li>- ALVES, W.(2015). Adobe Illustrator CC 2015 - Ferramentas e Técnicas para Desenho. São Paulo: Érica</li> <li>- Adobe Creative Team, .(2013). Adobe Illustrator CS5: Classroom in a book. San Jose: Adobe Press</li> <li>- LÉLIS, C.(2009). Illustrator CS3 &amp; CS4 - Curso Completo. Lisboa: FCA - Editora de Informática, Lda.</li> <li>- WOOD, B.(2018). Adobe Illustrator CC Classroom in a Book (2018 release). San Francisco: CA: Pearson Education, Adobe Press</li> <li>- CHELIUS, C. e SCHWARTZ, R. (2018). Learn Adobe Illustrator CC for Graphic Design and Illustration: Adobe Certified Associate Exam Preparation. San Francisco: CA: Pearson Education, Adobe Press</li> <li>- TALVANES, A.(2018). Adobe Illustrator CC a arte de vetorizar. Rio de Janeiro: Alta Books Editora</li> </ul> |
| Planned learning activities and teaching methods     | Lectures supported by audiovisual resources. Execution of practical exercises throughout the semester. Document creation, edition and preparation.  |
| Assessment Methods and criteria                      | Continuous assessment of practical assignments. Students who attend more than 2/3 (two thirds) of the classes and who have completed the practical assignments with a grade equal to or greater than 10 (ten) values are approved and exempted from the final evaluation under examination. Students with attendance less than 2/3 (two thirds) of the classes will be excluded from the final evaluation. The final evaluation under examination will be a practical exercise.   |
| Language of Instruction                              | Portuguese   Mentoring in English   |
| Work placement(s)                                    | Not applicable  |

Instituto Politécnico de Tomar 7-06-2021 8/50



| Course unit title                                    | Drawing   |
|--|---|
| Course unit code                                     | 96441   |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | First Year  |
| Semester/Trimester when the course unit is delivered | First Semester  |
| Number of ECTS credits allocated                     | 3   |
| Name of Lecturer(s)                                  | João Manuel de Sousa Nunes Costa Rosa   |
| Learning outcomes of the course unit                 | 1 Be able to see/interpret 2 Have a good command of expression and syntax 3 Be able to compose 4 Develop simple solutions 5 Adjust representation to a model, concept, type or meaning 6 Demonstrate graphic and visual culture 7 Use appropriate terminology 8 Demonstrate critical thinking   |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable  |
| Recommended optional                                 | Not applicable  |
| programme componentes                                |   |
| Course contentes                                     | I Expression II Structure III Configuration IV Dimension V Dynamism VI Quality VII Demarcation VIII Other expression and composition elements IX Graphic Culture X Register types XI Iconicity XII Ideogram and pictogram XIII Schematic XIV Content versus expression  |
| Recommended or required Reading                      | - , .(1983). Les images démaquillés. Approche scientifique de la communication par l?image. Québec: Les Éditions Riguil Internationales - , .(1983). Les images démaquillés. Approche scientifique de la communication par l?image. Québec: Les Éditions Riguil Internationales - , .(2006). El Languaje Visual. Barcelona: Paidós - , .(1997). A Sintaxe da Linguagem Visual. São Paulo: Martins Fontes - , .(2008). Fondantions of art and design. Londres: Laurence King Publishing , .(1983). Les images démaquillés. Approche scientifique de la communication par l?image. Québec: Les Éditions Riguil Internationales - , .(2006). El Languaje Visual. Barcelona: Paidós - , .(1997). A Sintaxe da Linguagem Visual. São Paulo: Martins Fontes - , .(2006). El Languaje Visual. Barcelona: Paidós - , .(1997). A Sintaxe da Linguagem Visual. São Paulo: Martins Fontes - , .(2008). Fondantions of art and design. Londres: Laurence King Publishing , .(1983). Les images démaquillés. Approche scientifique de la communication par l?image. Québec: Les Éditions Riguil Internationales - , .(2006). El Languaje Visual. Barcelona: Paidós - , .(1997). A Sintaxe da Linguagem Visual. São Paulo: Martins Fontes - , .(2006). El Languaje Visual. Barcelona: Paidós - , .(1997). A Sintaxe da Linguagem Visual. São Paulo: Martins Fontes - , .(2008). Fondantions of art and design. Londres: Laurence King Publishing. |
| Planned learning activities and teaching methods     | a) Expository lessons b) Application exercises: visual and typographic representation; c) Fundamentals of product design; d) Each exercise is assessed  |

Instituto Politécnico de Tomar 7-06-2021 9/50



### Assessment Methods and criteria

Formative assessment in class. End-of-semester test: presentation of proposed exercises The continuous assessment grade is the arithmetic average of all proposed assignments. Students with a pass mark (10/20 or more) will be exempt from sitting the exam. The exam consists of a practical test, which may also contain theoretical questions, focusing on the contents and practices listed in the present syllabus. Quantitative final grade from zero to twenty.

#### Language of Instruction

Portuguese

Work placement(s)

Not applicable

Instituto Politécnico de Tomar 7-06-2021 10/50



| Course unit title                                    | Graphic Technology   |
|--|--|
| Course unit code                                     | 964443   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | First Year   |
| Semester/Trimester when the course unit is delivered | First Semester   |
| Number of ECTS credits allocated                     | 7  |
| Name of Lecturer(s)                                  | Regina Aparecida Delfino<br>Paula Alexandra Costa Leite Pinto Pereira<br>Vitor Dinis Carita de Jesus   |
| Learning outcomes of the course unit                 | Learn the basics of the production phases in the printing industry and graphic reproduction systems.  Master the engraving and etching techniques Master letterpress hand setting and typsetting techniques.   |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable.  |
| Recommended optional programme componentes           | Not applicable.  |
| Course contentes                                     | 1. Work flow of the printing industry: pre-press, printing, postpress. Orig.: image/text. 2. Conventional Printing (Letterpress and flexography, offset, gravure and Pad Print, Screen Print) and Digital Print. Print forms. 3. Technical processes of engraving: woodcut, lithograph, drypoint, intaglio, mezzotint, etching, aquatint and soft varnish. 4. Typesetting: typometry, typology and classification  |
| Recommended or required<br>Reading                   | <ul> <li>VILELA, A.(1978). Cartilha das Artes Gráficas. Braga: STGRAMINHO</li> <li>HEITLINGER, P.(2006). Tipografia, origens, formas e uso das letras. Lisboa: Dinalivro</li> <li>DIAS, R. e MEIRA, S. (2018). Imprimere: arte e processo nos 250 anos da Imprensa Nacional.</li> <li>Lisboa: INCM, ESAD</li> <li>BAGILHOLE, R.(1996). Guia prático de Gravura. Lisboa: Editorial Estampa</li> <li>CATAFAL, J. e OLIVA, C. (2003). A Gravura. Lisboa: Editorial Estampa</li> <li>DAWSON, J.(1982). Guia completo de grabado e impressión - Técnicas y materiales. Barcelona: H. Blume Ediciones</li> <li>KIPPHAN, H.(2001). Handbook of print media: technologies and production methods. Heidelberg: Springer</li> <li>JOHANSSON, K. e LUNDBERG, P. e RYBERG, R. (2004). Manual de producción gráfica. Recetas Barcelona: Editorial Gustave Gili</li> <li>BAER, L.(2005). Produção Gráfica. São Paulo: Editora Senac</li> <li>BARBOSA, C.(2009). Manual de Produção Gráfica. Parede: Principia</li> </ul> |
| Planned learning activities and teaching methods     | 1.Presentation of theoretical contents using audiovisual resources. Discussion/analysis and comparison of printed items. 2.Field trip 3.Engraving: practical projects with etching. 4.Typesetting: hand setting exercises.   |

Instituto Politécnico de Tomar 7-06-2021 11/50



### Assessment Methods and criteria

Theoretical - The theoretical component will have continuous and final evaluation. Laboratory Practices  $(P \, / \, L)$  -  $P \, / \, L$  components have continuous evaluation, being considered attendance and delivery of requested exercises. Final note: is the arithmetic mean of the notes of the components. Continuous evaluation Continuous evaluation will only be carried out by frequency in the theoretical component. Students who obtain a grade equal to or greater than 10 (ten) values in each component are exempt from the final evaluation. Final evaluation The students will be admitted to the final evaluation with more than 2/3 (two thirds) of the practical / laboratory classes  $(P \, / \, L)$  and who have performed the practical exercises with a minimum grade of 10 (ten) values in each  $P \, / \, L$  component . Only final evaluation of the theoretical component will be carried out. Approval: final grade equal to or greater than 10 (ten) values, obtained by the arithmetic mean of the components.

#### Language of Instruction

Portuguese | Mentoring in English

Work placement(s)

Not applicable.

Instituto Politécnico de Tomar 7-06-2021 12/50



| Course unit title                                    | History of Graphic Communication Design I  |
|--|--|
| Course unit code                                     | 964459   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | First Year   |
| Semester/Trimester when the course unit is delivered | First Semester   |
| Number of ECTS credits allocated                     | 4  |
| Name of Lecturer(s)                                  | Maria Madalena Giraldes Barba Pessoa Jorge Oudinot Larcher<br>Maria João Bom Mendes dos Santos   |
| Learning outcomes of the course unit                 | 1. Get a better understanding of the history of graphic design from ancient times up to the Industrial Revolution 2. Understand its place in the history of western culture 3. Relate it to the history of the printed book 4. Become familiar with the art of illumination and engraving  |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | NA   |
| Recommended optional programme componentes           | NA   |
| Course contentes                                     | 1. Communication and Language, Symbols and Decryption Codes 2. Iconic and Verbal Language; Iconology and Writing(s) 3. The manuscript book, from ancient times to the late Middle Ages 4. Graphic Design from ancient beginnings to mediaeval illuminations 5. The symbolism of a functional art 6. The 15th century and the press 7. The printed book from the Renaissance to the Enlightenment   |
| Recommended or required<br>Reading                   | <ul> <li>- LABARRE, A.(2006). História do Livro. Lisboa: Livros Horizonte</li> <li>- BOLOGNA, G.(2000). Illuminated Manuscripts, The Book before Gutenberg. (Vol. 1). Milão - Londres: Thames and Hudson</li> <li>- BACKHOUSE, J.(1979). The Illuminated Manuscript. (Vol. 1). Singapura: Hardback Book</li> <li>- PURVIS, A. e MEGGS, P. (2009). História do Design Gráfico. São Paulo: Cosac Naify</li> </ul>  |
| Planned learning activities and teaching methods     | NA   |
| Assessment Methods and criteria                      | Students should undertake a written assessment and write a monograph (contributing 50% towards the final grade). An average mark of 10/20 exempts students from end-of-term exam. The monograph should comply with the guidelines provided in class and to a step-by-step plan. In the exam-based assessment, submission of monograph is not compulsory, with the final mark corresponding to the exam mark; however, the students who have done the monograph will be able to consider the average with it, should this average benefit them (in which case it will be worth 50% each). |
| Language of Instruction                              | Portuguese   |
| Work placement(s)                                    | NA   |

Instituto Politécnico de Tomar 7-06-2021 13/50



| Course unit title                                    | Image Processing   |
|--|--|
| Course unit code                                     | 964413   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | First Year   |
| Semester/Trimester when the course unit is delivered | First Semester   |
| Number of ECTS credits allocated                     | 5  |
| Name of Lecturer(s)                                  | Valter Nuno Garcez da Silva Ventura  |
| Learning outcomes of the course unit                 | 1) Master the specific image processing software; 2) Know how to optimize images according to the type of work; 3) Master the treatment, retouching and correction of images; 4) Know how to select and manipulate images;   |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable.  |
| Recommended optional programme componentes           | Not applicable.  |
| Course contentes                                     | <ol> <li>Image formats 2. Basic image corrections 3. Image editing, treatment and correction 4. Selection tools</li> <li>Image layers 6. Image manipulation 7. Advanced image manipulation and retouching</li> </ol>   |
| Recommended or required<br>Reading                   | - DANAHER, S.(2003). Adobe Photoshop Every tool explained!. London: Future Publishing Ltd - LYNCH, R.(2007). The Adobe Photoshop Layers Book. USA: Elsevier Ltd - BEARDSWORTH, J.(2005). Photoshop Blending Modes Cookbook for Digital Photographers, ,. East Sussex, UK: Ilex Press Limited |
| Planned learning activities and teaching methods     | Practical demonstration and explanation classes. Resolution of exercises, execution of tasks and analysis of results.  |
| Assessment Methods and criteria                      | Continuous evaluation. Constructive participation in class (20%). Evaluation of group work (40%). Evaluation of individual work (40%). Exam: delivery of proposed individual work in class + specific individual work (100%).  |
| Language of Instruction                              | Portuguese   |
| Work placement(s)                                    | Not applicable.  |

Instituto Politécnico de Tomar 7-06-2021 14/50



| Course unit title                                    | Psychology of Visual Perception   |
|--|---|
| Course unit code                                     | 96443   |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | First Year  |
| Semester/Trimester when the course unit is delivered | First Semester  |
| Number of ECTS credits allocated                     | 5.5   |
| Name of Lecturer(s)                                  | Isabel Maria da Cruz Ferreira   |
| Learning outcomes of the course unit                 | -Describe the functioning of visual systemProvide knowledge of perception organizationIdentify colour characteristics in psychological and psycho-sociological terms -Promote ability to represent the basic principles of good shapePromote ref  |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable.   |
| Recommended optional programme componentes           | Not applicable.   |
| Course contentes                                     | 1.Conceptual delimitation 2.Perception and knowledge (visual memory and visual thinking 3.Neurophysiology of sight 4.The Gestalt theory and the fundamental laws of perceptive grouping 5.Subjective outlines and visual illusions 6.Shadows 7.Colour and colour combinations (contrast and analogy) main characteristics 8.Colour and legibility 9.Colour expression (psychological and psycho-sociological)   |
| Recommended or required<br>Reading                   | <ul> <li>MONTCHAUD, R.(2014). La couleur et ses accords. Paris: Fleurus Idées.</li> <li>ITTEN, J.(2018). Art de la couleur. Paris: Dessain e Tolra.</li> <li>HELLER, E.(2017). A Psicologia das Cores. Como as cores afetam a emoção e a razão São Paulo: Editorial Gustavo Gili.</li> <li>GLEITMAN, H.(2014). Psicologia. Lisboa: Fundação Calouste Gulbenkian.</li> <li>ARNHEIM, R.(1998). Arte e percepção visual. São Paulo: Pioneira.</li> </ul> |
| Planned learning activities and teaching methods     | Lectures using datashow. Theoretical-practical classes including experiments, problem solving, case study and literature review.  |
| Assessment Methods and criteria                      | Two mid-term written tests for admission to or exemption from final examination. Examinations in approved examination periods.  |
| Language of Instruction                              | Portuguese   Mentoring in Portuguese  |
| Work placement(s)                                    | Not applicable.   |

Instituto Politécnico de Tomar 7-06-2021 15/50



| Course unit title                                    | Applied Chemistry   |
|--|---|
| Course unit code                                     | 96449   |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | First Year  |
| Semester/Trimester when the course unit is delivered | Second Semester   |
| Number of ECTS credits allocated                     | 5   |
| Name of Lecturer(s)                                  | Marco António Mourão Cartaxo  |
| Learning outcomes of the course unit                 | Students should understand general chemistry and its application in the graphic processes as well as the variables of chemical processes. Development of skills in laboratory practice of Chemistry, by performing some practical works.  |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable.   |
| Recommended optional programme componentes           | Not applicable.   |
| Course contentes                                     | Theoretical component: 1-Basic structure of matter; 2-Chemical bonding; 3-Stoichiometry; 4-Chemical equilibrium; 5-Oxidation and reduction; 6-Organic chemistry. 7-Chemistry of paper, inks and toners. Pratical component: Five practical assignments - volume measurement; preparation and standardization of solutions; paper pH; study of the revelation variables.   |
| Recommended or required<br>Reading                   | <ul> <li>Eldred, N.(2001). Chemistry for the Graphic Arts. Pittsburgh: GATF Press</li> <li>Atkins, P.(1989). General Chemistry. Nova Iorque: Scientific American</li> <li>Chang, R. e Goldsby, K. (2013). Química. New York: McGraw Hill</li> <li>Ebbing, D. e Gammon, S. (2012). General Chemistry. Belmont: Brooks/Cole</li> </ul>  |
| Planned learning activities and teaching methods     | Theoretical classes where the theoretical foundations are taught. Practical classes where exercises and laboratory works of the concepts studied in the theoretical component are applied.  |
| Assessment Methods and criteria                      | The theoretical evaluation (AT) is carried out through written tests in the period of frequency, with consultation of the Periodic Table and Ion Table, with a minimum average score of 07 points to obtain approval in the discipline. During the exam period, it is done through a single final test, with consultation of the Periodic Table and Ion Table, with a minimum score of 07 points to obtain approval in the discipline. The practical evaluation (AP) is carried out through the realization of writen reports regarding the practical works, with a minimum grade of 10 points. The final classification (CF) is obtained by applying the following formula: CF=(0.6xAT)+(0.4xAP) Students who do not carry out the five experimental works and the respective written reports will be excluded from the evaluation by exam, as the performance of these tasks is considered indispensable. |
| Language of Instruction                              | Portuguese  |
| Work placement(s)                                    | Not applicable.   |

Instituto Politécnico de Tomar 7-06-2021 16/50



| Course unit title                                    | Graphic Design I  |
|--|---|
| Course unit code                                     | 964411  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | First Year  |
| Semester/Trimester when the course unit is delivered | Second Semester   |
| Number of ECTS credits allocated                     | 6   |
| Name of Lecturer(s)                                  | Vitor Dinis Carita de Jesus<br>Maria João Bom Mendes dos Santos   |
| Learning outcomes of the course unit                 | 1 Master the basic visual syntax 2 Acquire comprehensive graphic visual literacy 3 Choosing, hierarchizing and manipulating typographic elements of a graphic project 4 Knowing how to draw symbols 5 Knowing how to combine image and text 6 Develop institutional identity projects   |
| Mode of delivery                                     | b-learning  |
| Prerequisites and co-requisites                      | Not applicable  |
| Recommended optional programme componentes           | Not applicable  |
| Course contentes                                     | 1 Introduction to graphic design: syntax and visual literacy 2 Composition 3 Shape, line, contour and fill, shape and background, texture, color 4 Choosing suitable fonts 5 Letter, word, phrase, text 6 Text and image 7 Iconic symbol design 8 Institutional identity  |
| Recommended or required<br>Reading                   | <ul> <li>Wilde, R. e Wilde, J. (2000). Visual Literacy: A Conceptual Approach to Graphic Problem Solving.</li> <li>USA: Watson-Guptill Publications Inc</li> <li>Philips, J. e Lupton, E. (2008). Graphic Design: The New Basics. USA: Princeton Architectural Press</li> <li>Wong, W.(2004). Diseño Grafico Digital. Espanha: Editorial Gustavo Gili</li> <li>Willberg, H.(2003). Primeros Auxilios en Tipografia. Espanha: Editorial Gustavo Gili</li> </ul>  |
| Planned learning activities and teaching methods     | 1 Exposition of introductory theoretical concepts to practical exercises 2 Accomplishment of several practical exercises of short duration 3 Monitoring the preparation of projects 4 Analysis of results   |
| Assessment Methods and criteria                      | Ten exercises will be carried out throughout the semester: the first six will weigh one (each) in the final grade; exercises seven and eight weigh three (each) in the final grade; and exercises nine and ten have weight of four (each) in the final grade. The dates of the evaluations are duly explained in each of the ten statements delivered in the class, and the exercises can only be delivered within those dates, unless there is a justification that constitutes an impediment to it. Only students who have developed at least eight out of 10 will be admitted to the exam or appeal. |
| Language of Instruction                              | Portuguese   Mentoring in English   |
| Work placement(s)                                    | Not applicable  |

Instituto Politécnico de Tomar 7-06-2021 17/50



| Course unit title                                    | Image Analysis  |
|--|---|
| Course unit code                                     | 96448   |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | First Year  |
| Semester/Trimester when the course unit is delivered | Second Semester   |
| Number of ECTS credits allocated                     | 4.5   |
| Name of Lecturer(s)                                  | João Manuel de Sousa Nunes Costa Rosa   |
| Learning outcomes of the course unit                 | I Interpret and describe images II Read critically/consciously visual messages III Value doubt/error/hypothesis/argument IV Acquire procedures and research on images V Value visual communication as text VI Value processes for visual experimentation on images  |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | NA  |
| Recommended optional programme componentes           | NA  |
| Course contentes                                     | 1 Image as mirror 2 Introduction to semiotics 3 Symbol and allegory 4 Visual rhetoric procedures 5 Reading images (visual literacy)   |
| Recommended or required<br>Reading                   | - , .(2002). Teoría de la Imagen Periodística. Madrid: Ediciones Pirámide<br>- , .(1996). Principios de teoría General de la Imagen. Madrid: Pirâmide<br>- , .(1989). Pensar la imagen. Madrid: Cátedra<br>- , .(1989). Retorica general. MadridBarcelona: Ediciones Paidós   |
| Planned learning activities and teaching methods     | NA  |
| Assessment Methods and criteria                      | Delivery, as part of ongoing assessment, the proposed work and exercises duly completed and incorporating the suggestions for improvement and transformation, which were provided in class. Quantitative final classification (0 to 20)Students who do not obtain the minimum mark in ongoing assessment will be elligile to sit the exam. This exam covers mainly theoretical aspects. Final mark from 0 to 20 (zero to twenty). |
| Language of Instruction                              | Portuguese  |
| Work placement(s)                                    | NA  |

Instituto Politécnico de Tomar 7-06-2021 18/50



| Course unit title                                    | Photography  |
|--|--|
| Course unit code                                     | 964444   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | First Year   |
| Semester/Trimester when the course unit is delivered | Second Semester  |
| Number of ECTS credits allocated                     | 4.5  |
| Name of Lecturer(s)                                  | António Martiniano Ventura   |
| Learning outcomes of the course unit                 | Understand photography as a complex process and how the photographic process builds the photographic representation of a given reality.  |
| Mode of delivery                                     | b-learning   |
| Prerequisites and co-requisites                      | Not applicable   |
| Recommended optional programme componentes           | Not applicable   |
| Course contentes                                     | The Light and its qualities; The photographic process and its areas of interest; The photographic process and the factors that determine the final result. The camera and its mechanisms; The image formation mechanism: perspective, framing, exposure control, focus and image sharpness; The photographic record as a technique of reproduction and dissemination of images;  |
| Recommended or required<br>Reading                   | - Hurburt, A.(1985). <i>Diseño fotográfico: interacción del diseño con la fotografía</i> . (Vol. 1). (pp. 1-127). Barcelona1: Gustavo Gili - Ventura, A.(0). <i>Para uma didática da imagem</i> - <i>Leitura e análise da imagem</i> . Acedido em10 de novembro de 2014 em https://dl.dropboxusercontent.com/u/6359651/TI%20II/Leitura_Imagem.pdf - Silveira Ramos, M. e Soudo, J. (0). <i>Manual de Técnicas Fotográficas</i> . Acedido em9 de novembro de 2014 em https://dl.dropboxusercontent.com/u/6359651/DTAG/1_Manual_Tec_Foto.pdf - Melo, C.(0). <i>Manual de Fotografia Digital</i> . Acedido em9 de novembro de 2014 em https://dl.dropboxusercontent.com/u/6359651/manuais%20de%20fotografia/5_Manual_Foto_Digital.pdf |
| Planned learning activities and teaching methods     | A set of experimental projects that, properly sequenced and related, will allow learning by doing, producing reflection on three basic questions: what photography is, what it is for and how it is done.  |
| Assessment Methods and criteria                      | Since the characteristics of this discipline require active student participation, it will be appropriate for the assessment of learning to be done on a continuous basis. Thus, for each of the proposed Experimental Projects, developed in class, an individual technical report will be requested. The final grade will result from the arithmetic average obtained in the set of these reports. Examination tests must include written test (60%) and presentation of individual reports related to the monitoring of Experimental Projects developed in practical class (40%).   |
| Language of Instruction                              | Portuguese   Mentoring in English  |
| Work placement(s)                                    | Not applicable   |

Instituto Politécnico de Tomar 7-06-2021 19/50



| Course unit title                                    | Prepress   |
|--|--|
| Course unit code                                     | 964445   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | First Year   |
| Semester/Trimester when the course unit is delivered | Second Semester  |
| Number of ECTS credits allocated                     | 7  |
| Name of Lecturer(s)                                  | Miguel Alexandre Pereira Sanches<br>Rui Miguel Sardinha Proença  |
| Learning outcomes of the course unit                 | 1- Identify printing processes; 2- Acquire skills in analogue and digital imposition; 3- Mastering the production steps of the graphic object; 4- Understand the operation of specific software; 5- Distinguish the different file formats; 6- Know the colour management systems.   |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable   |
| Recommended optional programme componentes           | Graphic Technology and Desktop Publishing  |
| Course contentes                                     | 1 - Characterization and identification of the Printing Processes; 2- Study of the printing forms; 3- Classification of originals, their analysis and control; 4- Processing technologies and densitometry applications; 5- Measurement/calibration instruments and control scales; 6- Text and image processing and integration 7- Manual assembly and digital imposition; 8- Workflows, CtF, CtP, CtS, CtC.  |
| Recommended or required<br>Reading                   | - BAER, L.(2004). Produção Gráfica. S. Paulo: SENAC - JOHANSSON, K. e LUNDBERG, P. e RYBERG, R. (2004). Manual de Producción Grafica: Recetas. Barcelona: GG - ANTON, K. e DEJARLD, T. (2020). Adobe InDesign Classroom in a Book (2021 release). San Francisco: Pearson Education, Adobe Press - KIPPHAN, H.(2001). Handbook of Print Media? Technologies and Production Methods. Berlin: Springer-Verlag - AMBROSE, G. e HARRIS, P. (2008). The Production Manual, A Graphic Design Handbook. Lausanne: AVA Publishing - FORMENTI, J. e REVERTE, S. (2008). La Imagen Gráfica y su Reproducción. Barcelona: Ediciones CPG - SEDDON, T.(2007). Images: A Creative Digital Workflow for Graphic Design. London: RotoVision - BARBOSA, C.(2012). Manual Prático de Produção Gráfica. Lisboa: Principia      |
| Planned learning activities and teaching methods     | Lessons supported by audiovisual media and analogue and digital technologies;  |
| Assessment Methods and criteria                      | Continuous assessment: PAGINATION - 50% assessed practical work >=10; 45% written test >=10; 5% for attendance. IMPOSITION - 50% practical work IMPOSITION - 50% theoretical-practical work with evaluation >=10; 45% written test >=10; 5% for attendance. COLOUR SEPARATION - 75% written test >=10; 20% for attendance; 5% original line-drawing creation. The students eligible to sit the exam will have to complete a summative test. The exam-based assessment covers is as follows: PAGINATION - 50% assessed practical work >=10; 50% assessed written test >=10. IMPOSITION - 50% assessed practical work >=10; 50% assessed written test >=10. COLOUR SEPARATION - 100% assessed written test >=10. Final mark is calculated as follows: 40% PAGINATION; 30% IMPOSITION; 30% COLOUR SEPARATION. |

Instituto Politécnico de Tomar 7-06-2021 20/50



| Language of Instruction | Portuguese   <b>Mentoring in</b> English |
|-------------------------|--|
| Work placement(s)       | Not applicable                           |

Instituto Politécnico de Tomar 7-06-2021 21/50



| Course unit title                                    | Typography  |
|--|---|
| Course unit code                                     | 964460  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | First Year  |
| Semester/Trimester when the course unit is delivered | Second Semester   |
| Number of ECTS credits allocated                     | 3   |
| Name of Lecturer(s)                                  | Regina Aparecida Delfino  |
| Learning outcomes of the course unit                 | 1. Deepen theoretical and practical knowledge of typography. 2. Understand the history and theory of typography. 3. Know how to choose typefaces. Know the typography rules and be able to apply them. 4. Create typeface designs.  |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable  |
| Recommended optional programme componentes           | Not aplicable   |
| Course contentes                                     | <ol> <li>Typography: casting techniques and processes.</li> <li>Origins and influences of typography.</li> <li>Typographic classifications and rules</li> <li>Digital typeface design</li> </ol>  |
| Recommended or required<br>Reading                   | <ul> <li>- Megs, P. e McKelvey, R. (2000). Revival of the Fittest: Digital Versions of Classic Typefaces. (pp. 1).</li> <li>New York: RC Publications</li> <li>- Jong, C.(2017). Type – A Visual History of Typefaces and Graphic Styles (1628-1938). (Vol. 1).</li> <li>Colonia: Taschen</li> <li>- Lupton, H.(2004). Thinking With Type – A Critical Guide for Designers, Writers, Editors &amp; Students. (Vol. 1). New York: Princeton Architectural Press</li> <li>- Henestrosa, C. e Meseguer, L. e Scaglione, J. (2017). How to Create Typefaces – from sketch to screen. Madrid: Tipo e Editorial</li> <li>- Cheng, K.(2006). Designing Type. (Vol. 1). Londres: Laurence King Publishing</li> <li>- Bringhurst, R.(1997). The Elements of Typographic Style. (Vol. 1). Vancouver: Hartley &amp; Marks</li> <li>- Baines, P. e Haslam, A. (2002). Type and Typography. (Vol. 1). Londres: Laurence King Publishing</li> <li>- Blackwell, L.(1993). La tipografia del siglo XX. (Vol. 1). Barcelona: Editorial Gustavo Gili</li> </ul> |
| Planned learning activities and teaching methods     | Presentation of theoretical content supported by audiovisual media. Development of practical and experimental exercises: manual and digital design. Supervised practical work.  |
| Assessment Methods and criteria                      | Continuous assessment The final mark is the weighted average of all the assignments completed: 1st (30%), 2nd (30%) and 3rd (40%). The final mark is the weighted average of all assignments: 1st (30%), 2nd (30%) and 3rd (40%) (30%+10% oral defense)   |
| Language of Instruction                              | Portuguese  |
| Work placement(s)                                    | Not applicable  |

Instituto Politécnico de Tomar 7-06-2021 22/50



| Course unit title                                    | Communication Ergonomics   |
|--|--|
| Course unit code                                     | 964437   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Second Year  |
| Semester/Trimester when the course unit is delivered | First Semester   |
| Number of ECTS credits allocated                     | 4  |
| Name of Lecturer(s)                                  | Maria João Bom Mendes dos Santos<br>Regina Aparecida Delfino   |
| Learning outcomes of the course unit                 | 1. Acquire general knowledge about ergonomics. 2. Understand the importance of ergonomics in communication design. 3. Be able to analyze communication design objects, considering the premises of communication ergonomics. 4. Know how to adopt the parameters of ergonomics in communication design.  |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable   |
| Recommended optional programme componentes           | Not applicable   |
| Course contentes                                     | 1. Ergonomics, definition and fundamentals 2. Communication ergonomics 2.1 Principles of user-centered design 2.2 Inclusive design and visual accessibility 3. Factors and elements of graphic design and communication ergonomics 3.1 Legibility and Rules for the use of typography. 3.2 Color and its influence 3.3 Communication composition and hierarchy 4. Tools and methods for communication ergonomics   |
| Recommended or required<br>Reading                   | - Mijksenaar , P.(2001). Una introducción al Diseño de la información. (Vol. 1). Naucalpan: Gustave Gili - Iida, I.(2005). Ergonomia, Projeto e Produção. (Vol. 1). São Paulo: Edgard Blücher Ltda - Lupton, E.(2010). Thinking with Type: A Critical Guide for Designers, Writers, Editors, and Students (Design Briefs). EUA: Princeton Architectural Press - Frascara, J.(2011). ¿Qué es el_diseño de información? . (Vol. 1). Buenos Aires: Ediciones Infinito - Frutiger, A.(2001). En torno a la tipografia Barcelona: Gustavo Gili - Bringhurst, R.(2005). Elementos do Estilo Tipográfico, Versão 3.0. (Vol. 1). São Paulo: Cosac Naify - Norman, D.(2006). Design do Dia-a-Dia. (Vol. 1). Rio de Janeiro: Rocco - Pettersson , R.(2016). Information Design Theories. (Vol. 1). Viena: International Institute for Information Design |
| Planned learning activities and teaching methods     | Presentation of theoretical content with the support of audiovisual media, study and analysis of cases. Development of $T/P$ assignments: case analysis / diagnosis and project development accompanied by the teacher.  |
| Assessment Methods and criteria                      | CONTINUOUS ASSESSMENT Attendance is mandatory in at least 2/3 of classes. The final grade is the arithmetic average of two works: 1. Analysis/diagnosis of ergonomics in communication objects (group work) – 50% (40% delivery + 10% presentation) 2. Final project – 50%. ASSESSMENT IN EXAM PERIODS Students with attendance equal to or higher than 2/3 (two thirds) of classes will be admitted to the exam, except for Worker-Student, according to IPT Academic Regulation, and who have presented their work during the semester, with a minimum of 7 values. Students must deliver and present the first work and deliver the final project, corresponding to the percentages referred to.  |
| Language of Instruction                              | Portuguese   Mentoring in English  |
|  |  |

Instituto Politécnico de Tomar 7-06-2021 23/50



Work placement(s) Not applicable



| Course unit title   | Graphic Design II  |
|---|--|
| Course unit code  | 964416   |
| Type of course unit   | Compulsory   |
| Level of Course unit  | First Cycle  |
| Year of Study   | Second Year  |
| Semester/Trimester when the course unit is delivered  | First Semester   |
| Number of ECTS credits allocated  | 6  |
| Name of Lecturer(s)   | Vitor Dinis Carita de Jesus<br>Maria João Bom Mendes dos Santos  |
| Learning outcomes of the course unit  | 1. To be able to create editorial design mock-ups; 2. To understand the typological differences between the various editorial design products: periodical and non-periodical publications; 3. To be able to implement paging in each type of editorial design based on texts and images provided.  |
| Mode of delivery  | Face-to-face   |
| Prerequisites and co-requisites   | Not applicable   |
| Recommended optional  | Not applicable   |
| programme componentes   | 1100 applicable  |
|   | 1. Introduction to editorial design; 2. Analysis of key examples and survey grids and typographical styles and paging; 3. Paging software; 4. Typographical hierarchies, page types composition and visual coherence of a publication.   |
| programme componentes   | 1. Introduction to editorial design; 2. Analysis of key examples and survey grids and typographical styles and paging; 3. Paging software; 4. Typographical hierarchies, page types composition and visual   |
| programme componentes  Course contentes  Recommended or required                                      | <ol> <li>Introduction to editorial design; 2. Analysis of key examples and survey grids and typographical styles and paging; 3. Paging software; 4. Typographical hierarchies, page types composition and visual coherence of a publication.</li> <li>SAMARA, T.(2007). <i>Grid, Construção e Desconstrução</i>. São Paulo: Cosac Naify</li> <li>LESLIE, J.(2003). <i>Nuevo diseño de revistas</i>. Barcelona: Editorial Gustavo Gili</li> </ol>   |
| programme componentes  Course contentes  Recommended or required Reading  Planned learning activities | <ol> <li>Introduction to editorial design; 2. Analysis of key examples and survey grids and typographical styles and paging; 3. Paging software; 4. Typographical hierarchies, page types composition and visual coherence of a publication.</li> <li>SAMARA, T.(2007). Grid, Construção e Desconstrução. São Paulo: Cosac Naify</li> <li>LESLIE, J.(2003). Nuevo diseño de revistas. Barcelona: Editorial Gustavo Gili</li> <li>LUPTON, E.(2006). Pensar com tipos. São Paulo: Cosac Naify</li> <li>Lectures supported by datashow. 2. Tutorials including practical exercises; 3. Supervision of editorial</li> </ol>                                |
| Planned learning activities and teaching methods Assessment Methods and                               | <ol> <li>Introduction to editorial design; 2. Analysis of key examples and survey grids and typographical styles and paging; 3. Paging software; 4. Typographical hierarchies, page types composition and visual coherence of a publication.</li> <li>SAMARA, T.(2007). <i>Grid, Construção e Desconstrução</i>. São Paulo: Cosac Naify</li> <li>LESLIE, J.(2003). <i>Nuevo diseño de revistas</i>. Barcelona: Editorial Gustavo Gili</li> <li>LUPTON, E.(2006). <i>Pensar com tipos</i>. São Paulo: Cosac Naify</li> <li>Lectures supported by datashow. 2. Tutorials including practical exercises; 3. Supervision of editorial projects.</li> </ol> |

Instituto Politécnico de Tomar 7-06-2021 25/50



| Course unit title                                    | History of Graphic Communication Design II  |
|--|---|
| Course unit code                                     | 964461  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | Second Year   |
| Semester/Trimester when the course unit is delivered | First Semester  |
| Number of ECTS credits allocated                     | 4.5   |
| Name of Lecturer(s)                                  | Maria João Bom Mendes dos Santos  |
| Learning outcomes of the course unit                 | 1. sensitize students to the role of Design and designers in our society; 2. develop critical and interventive skills in the design area, particularly in graphic communication.  |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable.   |
| Recommended optional programme componentes           | Not applicable.   |
| Course contentes                                     | 1. Futurism, Dadaism and Surrealism; 2. Russian Suprematism and Constructivism; 3. De Stijl; 4. Bauhaus; 5. Jan Tschichold and the New Typography; 6. Eric Gill and the Gill Sans; 7. International Typographic Style; 8. New Wave; 9. American Modernism; 10. Retro Design; 11. The pioneers of digital design   |
| Recommended or required<br>Reading                   |   |
| Planned learning activities and teaching methods     | 1. Lectures supported by audiovisual resources.   |
| Assessment Methods and criteria                      | Mid-term assessment: Assessment covers the theoretical work carried out in class (50% of the final mark) and a final test (50% of the final mark). Exam or Resit: Only students who have completed at least seven theoretical assignments as part of ongoing assessment will be elligible for exam. As in ongoing assessment, the exam covers the theoretical work carried out in class (50% of the final mark) and a test (50% of the final mark). |
| Language of Instruction                              | Portuguese  |
| Work placement(s)                                    | Not applicable.   |

Instituto Politécnico de Tomar 7-06-2021 26/50



| G tuta   |   |
|--|---|
| Course unit title                                    | Marketing   |
| Course unit code                                     | 964440  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | Second Year   |
| Semester/Trimester when the course unit is delivered | First Semester  |
| Number of ECTS credits allocated                     | 4   |
| Name of Lecturer(s)                                  | Maria de Fátima Rodrigues Pedro   |
| Learning outcomes of the course unit                 | 1.Understand market players and dynamics from the point of view of marketing; 2.Become familiar with the key market research methods; 3.Develop a marketing plan including the various strategic variables; 4.Have an understanding of the peculiarities of brand management.   |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable.   |
| Recommended optional programme componentes           | Not applicable.   |
| Course contentes                                     | 1. Introduction 2. Market Analysis 3. Market research 4. Explanatory consumer behaviour theories and models 5. Segmentation 6. Positioning 7. Branding 8. Marketing-Mix   |
| Recommended or required<br>Reading                   | <ul> <li>- Dionísio , P. e Al, E. (2015). Mercator XXI - Mercator da Língua Portuguesa - Teoria e Prática. Lisboa: Publicações Dom Quixote</li> <li>- Dionísio, P. e Al, E. (2010). Publicitor - Comunicação 360° online - ofline. Lisboa: Publicações Dom Quixote</li> <li>- Wiedemann, J.(2017). The Package Design Book. : Taschen</li> <li>- DuPus, S. e Silva, J. (2011). Package Design Workbook. USA: Rockport</li> </ul>  |
| Planned learning activities and teaching methods     | 1.Expository Lectures 2.Class debates. 3.Case study analysis.   |
| Assessment Methods and criteria                      | Continuous evaluation: Practical work (T1) with presentation and discussion, mandatory for all elements of the group, weighting 40%, minimum score of 10 (ten) values; Written test (T2), weighting 60%, minimum score of 8 (eight) values. The student must ensure a minimum attendance of 60%, without which he will be automatically excluded from the continuous assessment, having to undergo the final exam. The final classification is expressed by (T1 + T2), as long as the minimum grade has been obtained in the two evaluation elements. Otherwise, the final classification will be equal to the lowest of the T1 or T2 classifications. Students are approved to the course unit if the final classification of the two elements of assessment, rounded to the units, is greater than or equal to 10 (ten) values. Examination in Normal Season and Improvement and Examination of Appeal and Improvement: Written test (100%). Students are approved to the course unit if the final classification, rounded to the units, is greater than or equal to 10 (ten) values. |
| Language of Instruction                              | Portuguese  |
| Work placement(s)                                    | Not applicable.   |

Instituto Politécnico de Tomar 7-06-2021 27/50



| Course unit title                                    | Printing - offset I  |
|--|--|
| Course unit code                                     | 964446   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Second Year  |
| Semester/Trimester when the course unit is delivered | First Semester   |
| Number of ECTS credits allocated                     | 7  |
| Name of Lecturer(s)                                  | Paula Alexandra Costa Leite Pinto Pereira<br>Miguel Alexandre Pereira Sanches  |
| Learning outcomes of the course unit                 | 1- Students should master the preparation of printing moulds for the various printing processes. 2- They should be able to operate offset printing equipment, detect, assess and fix problems occurring during the printing process.   |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable   |
| Recommended optional programme componentes           | Not applicable   |
| Course contentes                                     | 1- Offset printing equipment; 2- Preparation and printing in offset equipments 3- Production of offset printed matter in 1, 2 and 4 colours 4- Mould making; 5- Quality control.   |
| Recommended or required Reading                      | <ul> <li>Rosner, H. e Walk, H. (2000). Artes Gráficas - Transferência e impressão de informações. São Paulo: ABTG</li> <li>Formentí, J. e Reverte, S. (2008). La Imagen Gráfica y su Reproducción. Barcelona: Ediciones CPG</li> <li>Pipes, A.(2001). Production for Graphic Designers. Londres: Laurence King</li> <li>Kipphan, H.(2001). Handbook of Print Media: technologies and production methods. Berlin: Springer-Verlag</li> <li>Johansson, K. e Ryberg, R. e Lundberg, P. (2011). A Guide to Graphic Print Production. New Jersey: Wiley &amp; Sons</li> <li>Evans, P.(2004). Forms, Folds &amp; Sizes. Massachusetts: Rockport Publishing</li> <li>Casals, R.(1987). Offset: Control de calidad. Barcelona: Du Pont-Howson</li> <li>Barbosa, C.(2009). Manual prático de produção gráfica. Lisboa: Principia</li> <li>Bann, D.(2007). The All New Print Production Handbook. New York: Watson-Guptill Publications</li> <li>Baer, L.(1999). Produção Gráfica. S. Paulo: SENAC</li> </ul>  |
| Planned learning activities and teaching methods     | 1 - Lectures supported by audiovisual resources. 2- Practice including problem-solving individually or in group  |
| Assessment Methods and criteria                      | Continuous assessment: OFFSET - 60% practical work done in class with a minimum mark of 10 (ten); 35% written test with a minimum mark of 10 (ten); 5% for attendance. MOULD MAKING - 65% assessed practical work done in class with a minimum mark of 10 (out of 20); 30% assessed final report, worksheet, test or theoretical work with a minimum mark of 10 (out of 20); 5% for attendance. The students elligible to sit the exam will have to take a written test about Offset. In the Mould Production component there will be no exam assessment due to the practical nature of these classes. Students who do not attend a minimum of 2/3 of the classes or do not fulfil the criteria for continuous assessment will not be elligible to sit the exam. Examination or resit cover the following: OFFSET - 60% assessed practical work done in class with a minimum mark of 10 40% written test with a minimum mark of 10 Course mark is calculated as follows: OFFSET - 60% practical work done in class with evaluation equal or superior to 10 (ten) points; 40% written evaluation with evaluation equal or superior to 10 (ten) points: 70% OFFSET; 30% MOULD MAKING |

Instituto Politécnico de Tomar 7-06-2021 28/50



| Language of Instruction | Portuguese     |
|-------------------------|----------------|
| Work placement(s)       | Not applicable |

Instituto Politécnico de Tomar 7-06-2021 29/50



| Course unit title                                    | Production Management  |
|--|--|
| Course unit code                                     | 964414   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Second Year  |
| Semester/Trimester when the course unit is delivered | First Semester   |
| Number of ECTS credits allocated                     | 4.5  |
| Name of Lecturer(s)                                  | Henrique Joaquim de Oliveira Pinho   |
| Learning outcomes of the course unit                 | 1. An overview of the concepts, theories and methods of production management, from stocks management to production control, including the costs associated therewith; 2. Students should be able to plan production, or interpret and optimize the existing production system.  |
| Mode of delivery                                     | b-learning   |
| Prerequisites and co-requisites                      | Not applicable   |
| Recommended optional programme componentes           | Not applicable   |
| Course contentes                                     | 1. Planning: planning techniques; the working method and timings; Gantt diagrams. 2. Procurement: purchasing and stock management. 3. Production: the new context of production management; maintenance; documentation in the PM; production typologies. 4. Productions costs. 5. Lean management: principles and tools. 6. Measuring the performance of a production system.  |
| Recommended or required<br>Reading                   | - , .(2020). Material de Apoio à UC de GP-LDTAG. Tomar: IPT - , .(2008). Gestão da Produção e Operações. Lisboa: Universidade Aberta - , .(1999). Organização e Gestão: Rumo à produtividade nas indústrias gráficas: Europa-América - , .(2007). Gestão da produção. Lisboa: Edições Lidel  |
| Planned learning activities and teaching methods     | Theory-oriented classes supported by audiovisual resources. Practice-oriented classes supported by case studies and problem solving. Monitoring of two group assignments.  |
| Assessment Methods and criteria                      | Formative assessment components include: $T1 = First$ test (Minimum mark: $6/20$ ) $T2 = Second$ test (Minimum mark: $6/20$ ) $A = Attendance$ proportional to the number of classes attended $TE = Final$ test (Minimum mark: $7/20$ ) $P1 = First$ assignment $P2 = Second$ assignment Continuous assessment $= 30\%T1 + 30\%T2 + 15\%P1 + 15\%P2 + 10\%A$ Final assessment if students fails the continuous assessment $= 70\%TE + 15\%P1 + 15\%P2$ |
| Language of Instruction                              | Portuguese   |
| Work placement(s)                                    | NA   |

Instituto Politécnico de Tomar 7-06-2021 30/50



| Course unit title                                    | Final Artwork  |
|--|--|
| Course unit code                                     | 964447   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Second Year  |
| Semester/Trimester when the course unit is delivered | Second Semester  |
| Number of ECTS credits allocated                     | 3  |
| Name of Lecturer(s)                                  | Miguel Alexandre Pereira Sanches   |
| Learning outcomes of the course unit                 | 1. Produce digital files for a graphic project; 2. Use correctly typography, colours, images and printing areas 3. Produce correct final files for imposition and printing according to ISO 12647.   |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | NA   |
| Recommended optional programme componentes           | Not applicable.  |
| Course contentes                                     | 1. File formats, print marks, bleed and slug; 2. Preparing images for print; 3. Fonts management; 4. Colour management; 5. Indesign Live Preflight tools; 6. Open files, PDF creation and editing.   |
| Recommended or required<br>Reading                   | <ul> <li>- AMBROSE, G.(2010). The Visual Dictionary of Pre-Press &amp; Production. London: AVA Publishing</li> <li>- McCUE, C.(2014). Real World Print Production with Adobe Creative Cloud. San José, California: Peachpit</li> <li>- MOREIRA, L.(2009). Arte-final Digital. Tomar: IPT</li> <li>- SOPLON, L. e, . (2011). On Print: from the screen to paper and vice versa. Barcelona: Indexbook</li> <li>- GATTER, M.(2010). Production for Print. Londres: Laurence King Publishing</li> <li>- ESTRADA, S.(2010). A Graphic Design Project from Start to Finish. Barcelona: Indexbook</li> <li>- HOMANN, J.(2009). Digital Color Management - Principles and Strategies for the Standardized Print Production. Berlin: Springer-Verlag</li> </ul> |
| Planned learning activities and teaching methods     | 1. Lectures and demos supported by datashow 2. Tutorials and exercises with problem solving.   |
| Assessment Methods and criteria                      | Ongoing assessment: practical assignments (90%) and class attendance (10%). Exam assessment: resolution of a summative practical exercise.   |
| Language of Instruction                              | Portuguese   Mentoring in English  |
| Work placement(s)                                    | Not applicable.  |

Instituto Politécnico de Tomar 7-06-2021 31/50



| Course unit title                                    | Graphic Design III   |
|--|--|
| Course unit code                                     | 964422   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Second Year  |
| Semester/Trimester when the course unit is delivered | Second Semester  |
| Number of ECTS credits allocated                     | 6  |
| Name of Lecturer(s)                                  | Maria João Bom Mendes dos Santos   |
| Learning outcomes of the course unit                 | 1. An overview of the different integrated information systems. 2. Develop self-critical skills and a general idea of the graphic design panorama. 3. Carry out quality stand-alone work   |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable.  |
| Recommended optional programme componentes           | Not applicable.  |
| Course contentes                                     | 1. Different information design systems: museums, recreational sites, natural parks, malls, schools and others. 2. Legal issues involved in information design projects.   |
| Recommended or required<br>Reading                   | <ul> <li>- Garland, K.(1994). Mr. Beck?s Undergroun Map. London: London Transport Museum</li> <li>- Neurath, O.(1980). International Picture Language. Reading: University of Reading</li> <li>- White, A.(2002). The Elements of Graphic Design. New York: Allworth Press</li> <li>- Jury, D.(2007). O que é a Tipografia?. Barcelona: Editorial Gustavo Gili</li> </ul>  |
| Planned learning activities and teaching methods     | 1. Lectures making use of datashow, images and audiovisual resources. Development of practical work.   |
| Assessment Methods and criteria                      | A project will be carried out throughout the semester, divided into three stages. At the end of each stage corresponds an evaluation, valid at three 100% on the final score, and each individually 33.33% in the final score. The final evaluation can be made in Attendance, Examination or Appeal, and students who do not make at least one evaluation throughout the semester, from the three stipulated for the completion of the project, will be excluded from the Exam. |
| Language of Instruction                              | Portuguese   |
| Work placement(s)                                    | Not applicable.  |

Instituto Politécnico de Tomar 7-06-2021 32/50



| Course unit title                                    | Multimedia Design I  |
|--|--|
| Course unit code                                     | 964420   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Second Year  |
| Semester/Trimester when the course unit is delivered | Second Semester  |
| Number of ECTS credits allocated                     | 5  |
| Name of Lecturer(s)                                  | Júlio César Moita Jorge Ruivo da Silva   |
| Learning outcomes of the course unit                 | Give a critical view of image and video. Understand its composition and format. Understand the concept of moving images as a vehicle and support for information and communication. Approach audiovisual language as form and concept. Create visual storytelling and animations   |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable   |
| Recommended optional programme componentes           | Not applicable   |
| Course contentes                                     | 1. Audiovisual language 2. Video editing 3. Audio Editing 4. Graphic animation 5. Project development  |
| Recommended or required<br>Reading                   | <ul> <li>Breslin, J.(2007). Produção de imagem e som. brasil: Campus</li> <li>Gyncild, B. e Fridsma, L. (2018). Adobe After Effects CC Classroom in a Book. (pp. 1-416). EUA: Adobe Press</li> <li>Martin, M.(2005). A Linguagem Cinematografica. Lisboa: Dinalivro</li> <li>Grilo, J.(2007). As lições do Cinema. (Vol. 1). (pp. 218). Portugal: Colibri</li> </ul> |
| Planned learning activities and teaching methods     | Lectures Practical classes   |
| Assessment Methods and criteria                      | Regular exam period: 15% Attendance 35% Theoretical Test (minimum score of 10 points to exempt from exam) 50% Practical Work Exam & Resit -50% Theoretical Test (minimum score of 10 points) -50% Practical Work   |
| Language of Instruction                              | Portuguese   |
| Work placement(s)                                    | Not applicable   |

Instituto Politécnico de Tomar 7-06-2021 33/50



| Course unit title                                    | Packaging and Processing  |
|--|---|
| Course unit code                                     | 964421  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | Second Year   |
| Semester/Trimester when the course unit is delivered | Second Semester   |
| Number of ECTS credits allocated                     | 5   |
| Name of Lecturer(s)                                  | Regina Aparecida Delfino  |
| Learning outcomes of the course unit                 | <ul> <li>Acquire and master knowledge on packaging design and technology.</li> <li>To be able to solve problems of design and production of packaging and promotional objects.</li> <li>Design and carry out packaging prototypes.</li> <li>Master the ArtiosCad and Studio Visualizer software.</li> </ul>   |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable.   |
| Recommended optional programme componentes           | Not applicable.   |
| Course contentes                                     | 1. Packaging and design 2. Methodology for packaging design. 3. Labels. 4. Design packaging and sustainability. 5. Packaging and technology   |
| Recommended or required<br>Reading                   | - STEWART, B.(2007). Packaging. Manual de diseño y produccion. Barcelona: Ediciones Gustavo Gili - MESTRINER, F.(2001). Design de Embalagem. Curso Básico. São Paulo: Makron Books - GIOVANNETTI, M.(1995). El Mundo del envase. Manual para el diseño y producción de envases y embalajes. Barcelona: Gustavo Gili - SONSINO, S.(1990). Packaging. Diseño, materiales, tecnologia. Barcelona: Gustavo Gili - BOYLSTON, S.(2009). Designing Sustaibnable Packaging. London: Laurence King Publishing - CAWTHRAY, R. e DENISON, E. (1999). Protótipo de embalagens. Lisboa: Destarte - MANZINI, E. e VEZZOLI, C. (2008). O Desenvolvimento de produtos Sustentáveis. Os requisitos ambientais dos produtos industriais. São Paulo: Edusp (Editora da Universidade de São Paulo) - FEFCO, E.(2007). International fibreboard case code. Bruxelas: FEFCO - European Federationa of Corrugated Board manufactures e ESBO - European Solid Board Organization - SHAOQIANG, W.(2017). Unpack Me Again!: Packaging Meets Creativity. Barcelona: Promopress |
| Planned learning activities and teaching methods     | Presentation of theoretical contents and analysis of the different packaging. Field trip. Execution of packaging design projects from the briefing phase to the final prototype using different materials.  |
| Assessment Methods and criteria                      | Continuous asses.: 30% written test and 70% projects. Classification is weighted average of all grades. Examination asses.: attend. at 2/3 of the classes and min. of 10/20 on projects. Written assessment only theor. Rating min. 10 val., Weight T/P.  |
| Language of Instruction                              | Portuguese   Mentoring in English   |
| Work placement(s)                                    | Not applicable.   |

Instituto Politécnico de Tomar 7-06-2021 34/50



| Course unit title                                    | Printing - Offset II and Pad Printing   |
|--|---|
| Course unit code                                     | 964448  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | Second Year   |
| Semester/Trimester when the course unit is delivered | Second Semester   |
| Number of ECTS credits allocated                     | 6   |
| Name of Lecturer(s)                                  | Miguel Alexandre Pereira Sanches<br>Paula Alexandra Costa Leite Pinto Pereira   |
| Learning outcomes of the course unit                 | 1- Provide in-depth knowledge of printing techniques with special emphasis to the traditional systems such as offset and pad printing. 2- Recognise, classify and master the methods of preparation of various special printing techniques.   |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable  |
| Recommended optional programme componentes           | Not applicable  |
| Course contentes                                     | 1- Classification of the main techniques for special printing; 2- Identification and production of prints using special prints; 3- Study of equipment and printing plates for pad printing; 4- Preparation of consumables for pad printing.   |
| Recommended or required<br>Reading                   | <ul> <li>- AMBROSE, G. e HARRIS, P. (2006). Basic Design: Print &amp; Finish. Londres: AVA Publishing</li> <li>- MORLOK, F. e BECKMANN, T. (2009). Extra: Encyclopaedia of Experimental Print Finishing. Basel: Birkhauser Verlag AG: Basel: Birkhauser Verlag AG</li> <li>- WITHAM, S.(2007). Print and Production Finishes for Promotional Items. Londres: Rotovision</li> <li>- Underconsideration, U.(0). FPO - For Print Only. Acedido em19 de fevereiro de 2018 em</li> <li>www.underconsideration.com/fpo</li> </ul> |
| Planned learning activities and teaching methods     | 1- Lectures supported by audiovisual resources. 2- Hands-on practical exercises individually or as part of a team.  |
| Assessment Methods and criteria                      | Continuous assessment: OFFSET - 60% written test >=10; 30% theoretical assignment; 10% for attendance. PAD PRINTING - 60% theoretical assignment; 30% assessed practical work done in class >=10; 10% for attendance.   |
| Language of Instruction                              | Portuguese   Mentoring in English   |
| Work placement(s)                                    | Not applicable  |

Instituto Politécnico de Tomar 7-06-2021 35/50



| Course unit title                                    | Quality Control  |
|--|--|
| Course unit code                                     | 964419   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Second Year  |
| Semester/Trimester when the course unit is delivered | Second Semester  |
| Number of ECTS credits allocated                     | 5  |
| Name of Lecturer(s)                                  | Luís Miguel Alves de Oliveira<br>Cecília de Melo Correia Baptista  |
| Learning outcomes of the course unit                 | Understanding the characteristics and performance of print media (with special emphasis on paper) in the graphic production flowchart - Pre-Press, Press and Post-Press, in order to guarantee the contractual quality of graphic works.   |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | N.A.   |
| Recommended optional programme componentes           | N.A.   |
| Course contentes                                     | 1- Fundamental principles of the papermaking process as a print substract. 2 - Characterization and quality control of paper. Properties that influence the print or printed product. 3 - Quality control in the various stages of the graphic production process.   |
| Recommended or required<br>Reading                   | <ul> <li>Biermann, C.(1996). Handbook of pulping and papermaking. San Diego: Academic Press</li> <li>Kiphan, H.(2001). Handbook of Print Media. Berlim: Springer</li> <li>Asunción, J.(2002). O Papel - Técnicas e Métodos Tradicionais de Fabrico. Barcelona: Editorial Estampa</li> <li>Barbosa, C.(2009). Manual Prático de Produção Gráfica. Lisboa: Principia</li> <li>Sindall, R.(2021). Apprenez a fabriquer du papier. Paris: Exibook</li> <li>Ek, M. e Gellerstedt, G. e Henriksson, G. (2009). Paper Products Physics and Technology. Berlim: Walter de Gruyter</li> <li>Smook, G.(2016). Handbook for pulp and paper technologists. Atlanta: Tappi Press</li> </ul>   |
| Planned learning activities and teaching methods     | Theoretical classes with oral presentation and audiovisual support. Practical-laboratory classes with exercises and analytical determinations. Accomplishment and presentation of group and individual works.  |
| Assessment Methods and criteria                      | Continuous evaluation Modules 1 and 2: Written tests on the subject taught (1 written test per module). Module 3: Continuous assessment of individual and group exercises. In order to be evaluated, students are required to attend at least two thirds of the classes taught in modules 2 and 3, being mandatory to carry out the works scheduled for module 3, as well as their presentation and defense. Students with an evaluation equal to or higher than 10 are exempt from exam. Examination (normal and appeal season) Students take a test to the component (s) to which they have not obtained a classification greater than or equal to 10 values. Final classification (in any evaluation moment) Arithmetic average of the ratings obtained in the 3 modules. |
| Language of Instruction                              | Portuguese   Mentoring in English  |
| Work placement(s)                                    | N.A.   |

Instituto Politécnico de Tomar 7-06-2021 36/50



| Course unit title                                    | Digital Printing   |
|--|--|
| Course unit code                                     | 964450   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Third Year   |
| Semester/Trimester when the course unit is delivered | First Semester   |
| Number of ECTS credits allocated                     | 3  |
| Name of Lecturer(s)                                  | Rui Miguel Sardinha Proença  |
| Learning outcomes of the course unit                 | 1- Acquire knowledge about digital printing (DP) processes; 2- Understand, distinguish and characterize technologies, products, raw materials and consumables; 3- Be aware of DP advantages 4- Identify types of products produced with DP 5- Operating with different DP equipment  |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | NA   |
| Recommended optional programme componentes           | NA   |
| Course contentes                                     | 1- Digital Printing; 2- Fundamentals and basic components; 3- Conventional vs Digital printing; 4- Advantages of Digital Printing; 5- Various types of Digital Printing; 6- Types of print jobs.   |
| Recommended or required<br>Reading                   | - JOHNSON, H.(2004). Digital Printing Start-Up Guide (Digital Process and Print).: Thomson, Course Technolog - JOHNSON, H.(2004). Mastering Digital Printing, Second Edition (Digital Process and Print).: Muska & Lipman - KIPPHAN, H.(2001). Handbook of Print Media; Technologies and Production Methods. Berlim: Springer-Verlag - Mortara, B.(2009). Impressão Digital: introdução e tecnologia. São Paulo: Scortecci - Nickelson, J.(2017). Fine Art Inkjet Printing: The Craft and Art of the Fine Digital Print. San Rafael, CA, USA: Rocky Nook - Jürgens, M.(2014). The Digital Print: Identification and Preservation. Los Angeles, USA: Getty Publications (0). Roland DG. Acedido em8 de setembro de 2018 em www.rolanddg.com |
| Planned learning activities and teaching methods     | 1- Delivery of theoretical concepts using audiovisual media; 2- Analysis of printed graphics objects by digital process; 3- Practical exercises.   |
| Assessment Methods and criteria                      | In the period of continuous evaluation, students with attendance higher than 2/3 (two thirds) of the classes and who have obtained a minimum grade equal to or greater than 10 (ten) values, both in the evaluation theoretical and practical work. The final grade will be awarded considering the following evaluation items: 70% practical work done, 30% theoretical assessment. Students with less than 2/3 (two thirds) of classes or who have less than 10 (ten) values in practical assignments will be excluded from the exam evaluation. The evaluation by exam or resource will focus on the theoretical contents.  |
| Language of Instruction                              | Portuguese   |
| Work placement(s)                                    | NA   |

Instituto Politécnico de Tomar 7-06-2021 37/50



| Course unit title                                    | Graphic Design IV   |
|--|---|
| Course unit code                                     | 964426  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | Third Year  |
| Semester/Trimester when the course unit is delivered | First Semester  |
| Number of ECTS credits allocated                     | 6   |
| Name of Lecturer(s)                                  | Maria João Bom Mendes dos Santos  |
| Learning outcomes of the course unit                 | 1. Distinguish between different communication design projects. 2. Develop critical skills and have a general panorama of graphic design. 3. Be able to produce quality stand-alone work.   |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable.   |
| Recommended optional programme componentes           | Not applicable.   |
| Course contentes                                     | 1. Study of typeface design. 2. Structured and analytical approaches to graphic design. 3. Making effective and substantial image judgements. 4. Pedagogical and human aspects of graphic design. 5. Graphic design projects.   |
| Recommended or required<br>Reading                   | <ul> <li>- Frutiger, A.(2001). En torno de la tipografia. Barcelona: Editorial Gustavo Gili</li> <li>- Gray, N.(1986). A history of lettering. Oxford: Phaidon Oxford</li> <li>- Aicher, O.(1967). Sistemas de signos en la comunicaçión visual. Barcelona: Editorial Gustavo Gili</li> <li>- Moles, A.(1990). O cartaz. São Paulo: Editora Perspectiva</li> </ul>  |
| Planned learning activities and teaching methods     | 1. Lectures making use of datashow.   |
| Assessment Methods and criteria                      | Continuous evaluation time: Three practical projects will be carried out during the semester that are worth 100% in the final grade (Project I, 20%; Project II, 40% and Project III, 40%). Time of examination or appeal: Only students who have completed at least one work in attendance season will be admitted to the exam. As in the frequency season, students will have to submit the three completed practical projects, which are worth 100% in the final grade (Project I, 20%; Project II, 40% and Project III, 40%). |
| Language of Instruction                              | Portuguese  |
| Work placement(s)                                    | Not applicable.   |

Instituto Politécnico de Tomar 7-06-2021 38/50



| Course unit title                                    | Multimedia Design II   |
|--|--|
| Course unit code                                     | 964427   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Third Year   |
| Semester/Trimester when the course unit is delivered | First Semester   |
| Number of ECTS credits allocated                     | 5  |
| Name of Lecturer(s)                                  | João Manuel de Sousa Nunes Costa Rosa  |
| Learning outcomes of the course unit                 | Convert information into interactive content Structure navigation with logic (screens and wireframes) Create meaningful animations Implement screen layouts for multimedia Apply knowledge during the process Use software with mastery Demonstrate knowledge of multimedia  |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | NA   |
| Recommended optional programme componentes           | Vector drawing and image processing software   |
| Course contentes                                     | Information and interactivity Flowcharts, layout and navigation maps Interaction between content Content and diagramation Wireframes Screen layout/design, functional or operative areas and objects, elements Presentation and mapping software Software for mockups/quick prototyping Designing or application exercises and tasks   |
| Recommended or required<br>Reading                   | - SCHWARTZ, E.(2013). <i>Mobile Prototyping with Axure 7</i> . (Vol. I). (pp). Birmingham: Packt Publishing - DALIOT, A.(2013). <i>Instant Axure RP Starter</i> . (Vol. I). (pp). Birmingham: Packt Publishing - HACKER, W.(2013). <i>Mobile Prototyping with Axure 7</i> . (Vol. I). (pp). Birmingham: Packt Publishing, U.(0). <i>Mobile Design Book of Trends 2015 &amp; 2016</i> . Acedido em31 de janeiro de 2017 em www.uxpin.com/studio/ebooks/mobile-ui-ux-design-trends-2015-2016/  |
| Planned learning activities and teaching methods     | I Insight/discussion of real cases II Concepts and software III Presentation/discussion of work proposals, according to previous guide provided IV Practical classes, software exercises V Application classes: exercises/projects   |
| Assessment Methods and criteria                      | -Exercises and practical work in class to demonstrate skills and content learned. Qualitative marking: Insufficient, Sufficient, Good and Very GoodPresentation in class of all required work and exercises, duly completed and incorporating suggestions for improvement and transformation provided in class. Final classification - from 0 to 20 (zero to twenty)Students who do not obtain a minimum final classification (ten points or more) in the mid-term test are eligible to sit the examExam comprises questions and tasks. Final classification is quantitative (from 0 to 20). |
| Language of Instruction                              | Portuguese   Mentoring in English  |
| Work placement(s)                                    | NA   |

Instituto Politécnico de Tomar 7-06-2021 39/50



| Course unit title                                    | Postpress   |
|--|---|
| Course unit code                                     | 964452  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | Third Year  |
| Semester/Trimester when the course unit is delivered | First Semester  |
| Number of ECTS credits allocated                     | 6   |
| Name of Lecturer(s)                                  | Regina Aparecida Delfino  |
| Learning outcomes of the course unit                 | Acquisition and mastery of theoretical and practical knowledge of postpress techniques, materials, equipment and industrial systems. Development of conceptual and operational planning skills in this sector.  |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable  |
| Recommended optional programme componentes           | Not applicable  |
| Course contentes                                     | Finishing and embellishing techniques. Components of the body of the book. Book production stages:folding, sewing and binding. Techniques concerning processed products. Techniques concerning stationery products. Techniques relating to industrial binding. Postpress techniques for commercial works. Embellishment. Materials and equipment. Die Cutting.  |
| Recommended or required<br>Reading                   | <ul> <li>- KIPPHAN, H.(2001). Handbook of print media: technologies and production methods. Heidelberg: Springer</li> <li>- LUNARDELLI, A. e ROSSI, S. (2004). Acabamentos. Sao Paulo: Editora Lunardelli</li> <li>- FISHEL, C.(2007). El arte de la produccion creativa. Materiales, encadernació y acabados. Barcelona: Index Book S.L.</li> <li>- HARRIS, P. e AMBROSE, G. (2008). Impressión y Acabados. Barcelona: Parramón Ediciones</li> <li>- FALWCET-TANG, R.(2007). Acabados de impressión y edicion de folletos y catálogos. Barcelona: Promopress</li> <li>- MC MURTRIE, D.(1982). O livro. Lisboa: Fundação Caluste Gulbelkian</li> </ul>  |
| Planned learning activities and teaching methods     | Presentation of the theoretical contents with support of audiovisual resources, analysis of different graphical objects. Theoretical and practical classes including exercises for implemention of the concepts taught. Field trips   |
| Assessment Methods and criteria                      | Continuous evaluation will be carried out by theoretical frequency, which corresponds to 40% of the total grade and 60% corresponds to the practical projects carried out during the semester. In the theoretical part, a written test will be carried out. In the practical part, the students will have to develop during the semester: five individual practical exercises of prototyping and a written theoretical-practical work, individual or in group. The grade is a weighted average of the values obtained. A minimum of 10 values is considered as the theoretical frequency and practice Students who obtain a weighted average of 10 (ten) or more are exempt from the final evaluation. Students who do not attend at least 2/3 (two-thirds) of classes or have not completed the requested work or who, in doing so, obtain a grade lower than 10 (ten) values will be excluded from the continuous and final evaluation. Final evaluation Students will be admitted to the final evaluation with more than 2/3 (two-thirds) of the classes and have completed the practical projects with a minimum grade of 10 points. Only theoretical content will be examined. |

Instituto Politécnico de Tomar 7-06-2021 40/50

above.

Approval: final mark equal to or greater than 10 (ten) values, obtained by the weighted average indicated



| Language of Instruction | Portuguese   Mentoring in English |
|-------------------------|-----------------------------------|
| Work placement(s)       | Not applicable                    |

Instituto Politécnico de Tomar 7-06-2021 41/50



| G  |   |
|--|---|
| Course unit title                                    | Quality Management  |
| Course unit code                                     | 964449  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | Third Year  |
| Semester/Trimester when the course unit is delivered | First Semester  |
| Number of ECTS credits allocated                     | 4   |
| Name of Lecturer(s)                                  | Luís Miguel Alves de Oliveira<br>Ana Paula Gerardo Machado  |
| Learning outcomes of the course unit                 | Know the basic concepts and principles of Quality; Know the normative references for Quality, Environment and Safety Management Systems; Understand and implement the requirements of NPENISO9001: 2015 and NPENISO 17025: 2018; Implement measures for continuous improvement.   |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable.   |
| Recommended optional programme componentes           | Not applicable.   |
| Course contentes                                     | The strategic importance of the quality of products and services. Standardization and Quality Support Systems. Portuguese Quality System. Accreditation and Certification. Integrated Systems Quality, Environment and Safety. Implementation of Quality Management Systems according to NP EN ISO 9001: 2015. Audits.  |
| Recommended or required<br>Reading                   | <ul> <li>Ramos Pires, A.(2004). Qualidade-Sistemas de Gestão da Qualidade. Lisboa: Sílabo</li> <li>Capricho, L. e Lopes, A. (2007). Gestão da Qualidade. Lisboa: RH Ed,</li> <li>Machado, A.(2020). Apontamentos Gestão da Qualidade. IPT: IPT</li> <li>Dafeo, J.(2016). Juran's Quality Handbook. (Vol. 1). Ohaio: McGraw-Hill Education</li> <li>Monteiro, , I.(2009). Apontamentos Gestão da Qualidade. (Vol. 1). IPT: IPT</li> </ul>  |
| Planned learning activities and teaching methods     | Expository and interactive classes with presentation of theoretical concepts and practical component with debate on the interpretations and methodologies proposed for quality assurance and management. Discussion and analysis of real cases.   |
| Assessment Methods and criteria                      | Continuous evaluation: Written, mandatory work, carried out in groups of 2 to 4, preferably 3, elements with a weighting of 40% in the assessment; Written test - 60%; Exam exemption: minimum score of 8 points in the written test (test with a score of 20 points) and total classification, weighted score, greater than or equal to 9.5 points, in the continuous evaluation; Assessment by Exam in all seasons: Mandatory written work carried out in assessment continues in groups of 2 to 4, preferably 3, elements with a weighting of 40% in the assessment; Written test - 60% Students are approved with a minimum grade of 8 values in the written test (test with a quotation of 20) and total classification, weighted grade, greater than or equal to 9.5. |
| Language of Instruction                              | Portuguese  |
| Work placement(s)                                    | Not applicable.   |

Instituto Politécnico de Tomar 7-06-2021 42/50



| Course unit title                                    | Screenprinting  |
|--|---|
| Course unit code                                     | 964451  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | Third Year  |
| Semester/Trimester when the course unit is delivered | First Semester  |
| Number of ECTS credits allocated                     | 6   |
| Name of Lecturer(s)                                  | Luís Miguel Alves de Oliveira   |
| Learning outcomes of the course unit                 | Provide knowledge and technical expertise in the silk screen printing process using tools, machinery and miscellaneous materials inherent to the process.   |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable  |
| Recommended optional programme componentes           | Not applicable  |
| Course contentes                                     | Silkscreen Pre-press Printing Post-press Quality control of the production process  |
| Recommended or required<br>Reading                   | <ul> <li>- Kiphan, H.(2001). Handbook of Print Media. (Vol. 1). Alemanha: Springer</li> <li>- Barbosa, C.(2009). Manual Prático de Produção Gráfica. (Vol. 1). Lisboa: Principia</li> <li>- Stephens, J.(1996). Screen Process Printing. (Vol. 1). Inglaterra: Blue print</li> <li>- SEFAR, S.(2006). Handbook for screen printers. (Vol. 1). Suiça: Sefar Inc. Printing Division</li> <li>- Komurki, J. e Luca Bendandi, L. e Demoratti, D. (2018). Mestres da Serigrafia. (Vol. 1). Brasil: Editorial Gustavo Gili</li> </ul>   |
| Planned learning activities and teaching methods     | Theoretical/practical classes supported by audiovisual resources. Study/description of mechanisms and technologies for industrial, artisanal and artistic printing processes. Laboratory work.  |
| Assessment Methods and criteria                      | 1. Continuous assessment: 1.1. Class attendance: 5% 1.2. In-class coursework: 65% (1st assignment - 10%; 2nd - 15%, 3rd - 20%, 4th - 20%) 1.3. Written test (theoretical): 30% Students who do not meet the following criteria will be excluded from the evaluation: Attendance in 2/3 (two thirds) of the classes taught, and have performed the practical exercises requested with a grade equal to or greater than 10 (ten) values. 2 - Exam (all seasons) 2.1. Class attendance: 5% (point 1.1) 2.2 Work done during classes: 65% (point 1.2) 2.3. Written test: 30% (will only focus on the theoretical contents of the Course) The student workers must agree with the teacher the methodology to be adopted so that there is due monitoring in the work to be carried out, otherwise they lose the right to attend the U.C |
| Language of Instruction                              | Portuguese  |
| Work placement(s)                                    | Not applicable  |

Instituto Politécnico de Tomar 7-06-2021 43/50



| Course unit title                                    | Binding and Conservation of Graphic Documents  |
|--|--|
| Course unit code                                     | 964462   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Third Year   |
| Semester/Trimester when the course unit is delivered | Second Semester  |
| Number of ECTS credits allocated                     | 5  |
| Name of Lecturer(s)                                  | Regina Aparecida Delfino<br>Paula Alexandra Costa Leite Pinto Pereira  |
| Learning outcomes of the course unit                 | <ol> <li>Understand the preservation/conservation concepts.</li> <li>Assess the resistance and durability of materials and production processes.</li> <li>Be able to solve problems related to the conservation of graphic documents.</li> <li>Know and employ the techniques of artistic and modern binding</li> </ol>  |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable   |
| Recommended optional programme componentes           | Not applicable   |
| Course contentes                                     | 1. Preservation principles and ethics. 2. Preservation applied to books and graphic documents. 3. Degradation agents. 4. Examination and diagnosis methods. 5. Artistic and modern binding.  |
| Recommended or required<br>Reading                   | - BOSQUET., E.(1989). Traité théorique et pratique de lárt du relieur. (Vol. 1). Paris: NA - JOHNSON, A.(1985). The practical guide to craft bookbinding. London:: Thames and Hudson - VITORINO., T. e MELO, M. e CARLYLE., L. e OTERO., V. (2016). New insights into brazilwood lake pigments manufacture through the use of historically accurate reconstructions. London:: Taylor & Francis Online - LIENARDY., A. e DAMME., P. (1992). La désacidification de masse des livres et documents. Bruxelles:: Institut royal du patrimoine artistique - LIBRANDO., V. e MINNITI., Z. e LORUSSO., S. (2011). Ancient and modern paper characterization by FTIR and Micro-Raman spectroscopy Bolonha: Conservation science in cultural heritage, 11 |
| Planned learning activities and teaching methods     | 1- Lectures with the support of audiovisual resources. 2- Practical work individually or as part of a team performing tasks and solving practical problems.  |
| Assessment Methods and criteria                      | Continuous assessment: attendance to 2/3 of practical laboratory classes. Attendance 5%, assignments carried out during classes 65%, written test 30%. Exam-based assessment: one written test that will cover only theoretical aspects corresponding to 30% of the final mark. Attendance (5%) Work done in class (65%).  |
| Language of Instruction                              | Portuguese   |
| Work placement(s)                                    | Not applicable   |

Instituto Politécnico de Tomar 7-06-2021 44/50



| Course unit title                                    | Final Project  |
|--|--|
| Course unit code                                     | 964456   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Third Year   |
| Semester/Trimester when the course unit is delivered | Second Semester  |
| Number of ECTS credits allocated                     | 7.5  |
| Name of Lecturer(s)                                  | Regina Aparecida Delfino<br>Maria João Bom Mendes dos Santos   |
| Learning outcomes of the course unit                 | 1. Ability to design and present a project; 2. Know how to select the most appropriate support for one project; 3. Know how to coordinate a project in the different stages of development; 4. Know how to adapt the project to existing technical, environmental and economic constraints.  |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable.  |
| Recommended optional programme componentes           | Not applicable.  |
| Course contentes                                     | 1. Development of two projects: briefing, budget, concept, maquete, artwork, prepress, printing and post-printing; 2. Selection of appropriate print formats, media, finishes, typography, colors, images and printing stains; 3. Integrate sustainability criteria in the development of projects; 4. Professional deontology and contact with customers; 5. Quality Control.   |
| Recommended or required<br>Reading                   | <ul> <li>Myers, D.(2013). The Graphic Designer's Guide to Portfolio Design. New Jersey: Wiley</li> <li>Hugues, P.(2010). Exhibition Design. Londres: Laurence King Publishing</li> <li>Welsh, C.(2013). Design: Portfolio: Self promotion at its best. Londres: Rockport Publishers</li> <li>Shaughnessy, A.(2005). How to Be a Graphic Designer: Without Losing Your Soul. Londres: Laurence King Publishing</li> </ul> |
| Planned learning activities and teaching methods     | 1. Classes of monitoring and discussion of the proposals developed by the students for the projects mentioned above; 2. Guidance for the submission of projects; 3. Constructive criticism during the presentations of the work.   |
| Assessment Methods and criteria                      | During the semester there will be two evaluation moments, which correspond to two projects (weighting 50%/50%), proposed by different teachers each. Only students who have attended at least 2/3 of the classes will be admitted to examination or appeal, and the evaluation at the times referred to will fall on the same two projects mentioned above (weighting 50%/50%).  |
| Language of Instruction                              | Portuguese   |
| Work placement(s)                                    | Not applicable.  |

Instituto Politécnico de Tomar 7-06-2021 45/50



| Course unit title                                    | Graphic Budgeting  |
|--|--|
| Course unit code                                     | 964455   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Third Year   |
| Semester/Trimester when the course unit is delivered | Second Semester  |
| Number of ECTS credits allocated                     | 5  |
| Name of Lecturer(s)                                  | Luís Miguel Alves de Oliveira  |
| Learning outcomes of the course unit                 | - Understand the main concepts of graphic budgeting Know methods for making budgets for the printing industry Determine the production costs of a graphic product/work.  |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable   |
| Recommended optional programme componentes           | Not applicable   |
| Course contentes                                     | Budgeting in the Printing Industry. The concept of the Budget and its purpose. The variables that intervene in the budgeting process. Raw materials and subsidiaries to the production process.  |
| Recommended or required<br>Reading                   | <ul> <li>Bann, D.(2008). Actualidade en la Producción de Artes Gráficas. (Vol. 1). Barcelona: Blume</li> <li>Barbosa, C.(2009). Manual Prático de Produção Gráfica. (Vol. 1). Lisboa: Principia</li> <li>Kiphan, H.(2001). Handbook of Print Media. (Vol. 1). Alemanha: Springer</li> <li>Baer, L.(1999). Produção Gráfica. (Vol. 1). S. Paulo: SENAC</li> </ul> |
| Planned learning activities and teaching methods     | Theoretical Pratical sessions, in the most theoretical aspect - Oral exhibition using audio-visual means; and in more practical sessions - development of practical work and budgeting exercises.  |
| Assessment Methods and criteria                      | Practical work - 20% Written assessment in the period of frequency and exam - 80% Exam exemption: Students with a final average equal to, or higher, than 10 values. Exam: Students are approved with a score equal to, or higher, than 10 values.   |
| Language of Instruction                              | Portuguese   |
| Work placement(s)                                    | Not applicable   |

Instituto Politécnico de Tomar 7-06-2021 46/50



| Course unit title                                    | Management and Strategy   |
|--|---|
| Course unit code                                     | 964454  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | Third Year  |
| Semester/Trimester when the course unit is delivered | Second Semester   |
| Number of ECTS credits allocated                     | 4.5   |
| Name of Lecturer(s)                                  | Maria de Fátima Rodrigues Pedro   |
| Learning outcomes of the course unit                 | 1. Identify information from the analysis of the environment and the analysis of the company. 2. Understand and know how to apply the concepts, models and techniques of strategic analysis. 3. Understand the different situations of strategic analysis. 4. Develop a critical reflection. Make decisions.  |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | Not applicable.   |
| Recommended optional programme componentes           | Not applicable.   |
| Course contentes                                     | 1. General notions of strategy and planning. 2. Strategic analysis. 3. Strategy formulation. 4. Matrix analysis. 5. Planning and control. 6. Organization and strategic implementation.   |
| Recommended or required<br>Reading                   | <ul> <li>Neves, J.(2011). Avaliação e Gestão da Performance Estratégica da Empresa . Alfragide: Texto Editores</li> <li>Buckingham, M.(2005). Gestor de Sucesso. (Vol. 1). Lisboa: Biblioteca Exame</li> <li>Sousa, A.(1998). Introdução à Gestão: Uma Abordagem Sistémica (Vol. 1). Lisboa: Editorial Verbo</li> <li>Teixeira, S.(2020). Gestão estratégica. Lisboa: Escolar Edtora</li> <li>Carpenter, M. e Sanders, W. (2009). Strategic Management A Dynamic Perspective. England: Pearson Prentice Hall</li> <li>Grant, R.(2013). Comtemporary Strategic Analysis. UK: Wiley</li> <li>Freire, A.(2020). Estratégia - Criação de Valor Sustentável em Negócios Tradicionais e Digitais. Lisboa: Bertrand Editora</li> </ul> |
| Planned learning activities and teaching methods     | 1. Expository method, for presentation of theoretical frameworks of reference. 2. Participative, with analysis, discussion and resolution of practical cases and consolidation of the themes presented in class. 3. Self study, autonomous work   |
| Assessment Methods and criteria                      | Continuous assessment: Two mandatory assessment components: practical work with presentation and discussion 50% weighting - minimum of 10 values + 50% written test weighting - minimum of 8 values. Examination and Improvement Assessment: Written test at the established exam times, 100%.  |
| Language of Instruction                              | Portuguese  |
| Work placement(s)                                    | Not applicable.   |

Instituto Politécnico de Tomar 7-06-2021 47/50



| Course unit title                                    | Multimedia Design III   |
|--|---|
| Course unit code                                     | 964431  |
| Type of course unit                                  | Compulsory  |
| Level of Course unit                                 | First Cycle   |
| Year of Study  | Third Year  |
| Semester/Trimester when the course unit is delivered | Second Semester   |
| Number of ECTS credits allocated                     | 5   |
| Name of Lecturer(s)                                  | João Manuel de Sousa Nunes Costa Rosa   |
| Learning outcomes of the course unit                 | Performance criterion 01: Read, identify, propose. Performance criterion 02: Use, test, recreate, represent. Performance criterion 03: Use, Edit. Performance criterion 04: Subordinate, enrich. Performance criterion 05: Disclose, Present, Argue. Performance criterion 06: Reformulate, alter.  |
| Mode of delivery                                     | Face-to-face  |
| Prerequisites and co-requisites                      | NA  |
| Recommended optional programme componentes           | NA  |
| Course contentes                                     | Visual Problems and arguments Storyboards and elements Representation techniques Interface and others Space/time Frame/layer STB, audio and animations Software   |
| Recommended or required<br>Reading                   | - BEN TU SHU, S.(2015). <i>Motion Graphics in Branding</i> . (Vol. I). (pp). Hong Kong: Sendpoint Publishing - BLAZER, L.(2016). <i>Animated Storytelling. Berkeley</i> . (Vol. I). (pp). Berkeley: Peachpit Press - BRAHA, Y.(2011). <i>SCreative Motion Graphic Titlling for Film, Video and the Web</i> . (Vol. I). (pp). Burlington: Focal Press  |
| Planned learning activities and teaching methods     | I)Lectures: concepts II)Expository lessons: analysis of film solutions, animations, plans, visual scripts III)application lessons: exercises/designing movies IV)formative assessment, process and results V) Summative assessment of final products  |
| Assessment Methods and criteria                      | 1. Exercises and practical work performed in class to demonstrate skills and content learned.  2. Assessment is formative. Qualitative marking: Insufficient, Sufficient, Good and Very Good.  3. Presentation in class of the required work and exercises, duly completed and incorporating the suggestions for improvement and transformation provided in class. Quantitative final classification, from zero to twenty. 4. Students who do not pass continuous assessment will be eligible to sit the exam. The exam includes questions and tasks. Final classification from 0 to 20 (zero to twenty). |
| Language of Instruction                              | Portuguese  |
| Work placement(s)                                    | NA  |

Instituto Politécnico de Tomar 7-06-2021 48/50



| Course unit title                                    | Organizational Behaviour   |
|--|--|
| Course unit code                                     | 964433   |
| Type of course unit                                  | Compulsory   |
| Level of Course unit                                 | First Cycle  |
| Year of Study  | Third Year   |
| Semester/Trimester when the course unit is delivered | Second Semester  |
| Number of ECTS credits allocated                     | 3  |
| Name of Lecturer(s)                                  | Isabel Maria da Cruz Ferreira  |
| Learning outcomes of the course unit                 | The students should: - acquire the basics of organizational behaviour acquire knowledge regarding the key organizational behavioural procedures develop interpersonal, teamwork and negotiation skills develop critical insight about organizational behaviour.  |
| Mode of delivery                                     | Face-to-face   |
| Prerequisites and co-requisites                      | Not applicable.  |
| Recommended optional programme componentes           | Not applicable.  |
| Course contentes                                     | 1. Conceptual delimitation of the subject. 2. Communication (objectives, analysis, competences). 3. Motivation (motivational process, major theories and job satisfaction). 4. Leadership (major studies and results). 5. Citizenship in the organizations (the significance of justice, attitudes, personality, consequences). 6. Conflict and negotiation.   |
| Recommended or required<br>Reading                   | <ul> <li>ROHRICH, O.(2014). Os 11 Elementos da Motivação. Lisboa: Lidel Idioma.</li> <li>CAETANO, A.(2011). Manual de Psicossociologia das organizações. Lisboa: Escolar Editora.</li> <li>GIBSON, J.(2006). Organizações. Comportamento, estrutura e processos. São Paulo: McGraw-Hill.</li> <li>PINA e CUNHA, M.(2016). Manual de comportamento organizacional e gestão. Lisboa: Editora Recursos Humanos.</li> <li>NEWSTROM, J.(2008). Comportamento Organizacional. O Comportamento Humano no trabalho.</li> <li>São Paulo: McGraw-Hill.</li> <li>REGO, A.(2016). Comunicação pessoal e Organizacional. Lisboa: Editora Sílabo.</li> </ul> |
| Planned learning activities and teaching methods     | Theoretical-practical classes involving oral presentation based on audiovisual resources, case study presentation/discussion, roleplay, brainstorming, practical exercises and team games.   |
| Assessment Methods and criteria                      | - One written test allowing admission to or exemption from final examination Pre-established examination periods.  |
| Language of Instruction                              | Portuguese   Mentoring in Portuguese   |
| Work placement(s)                                    | Not applicable.  |

Instituto Politécnico de Tomar 7-06-2021 49/50

