



| Oterelling | | | RAL INI | | | | | | |
|--|---|--|------------------------------------|----------------------------------|-------------------------|---------|--------------------|------------------|-----------------|
| Studies DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERI | | | NG | Subject | GRAPHIC EXF | RESS | ION | | |
| Semester | 1 | Course 2 | | Mention / Field of | | | | | |
| Character | BASIC TRAININ | G | | specialisation | | | | | |
| Plan | 2022 | Modality Face | -to-face | Language | EUSKARA/CA | STELL | ANO | | |
| Credits | 6 | Hours/week 3.83 | | Total hours | 69 class hours hours | + 81 n | on-cla | ss hours | = <u>150 to</u> |
| | | 2030 |) AGENI | DA GOALS | | | | | |
| NORK AND 9 ADUSTRY, INDIVIDUAL DE GROWTH | | | | | | | | | |
| | | | PROFES | SORS | | | | | |
| ZUGASTI T | ESO, FELIX | | | | | | | | |
| | RAZKIN, MAID | ER | | | | | | | |
| | - | REQUIRED | PREVIC | | GE | | | | |
| | Subj | | | | Know | ledge | | | |
| APHIC EXPRE | | | | () | lo previous kno | | | red) | |
| | | L <u>E</u> 4 | RNING | RESULTS | | | | | |
| | - | | | | | кс | sк | AB | ECTS |
| R201 - To repre fining the neces | | any assembly following the | ne represe | ntation and dimensio | ning rules, | | x | | 5,4 |
| RTR1 - To devel | op interdisciplina | ry projects specific to the | | | | | x | | 0,36 |
| | | nan rights and fundamentan the SDGs - to acquire a | | | | | | | |
| ant-garde, demo | onstrating the ab | ility to work in multidiscipli | | | | | | | |
| h a high degree | | deas and the arguments t | hat cuppor | t thom in an orderly | clear and | | x | | 0,24 |
| | | ing, based on quality infor | | | | | * | | 0,24 |
| | | iscriminatory language | | | | | | | |
| | | | | | | | | Total: | 6 |
| : Knowledge or Con | tent / SK: Skills / AB | Abilities | | | | | | | |
| | | | | | | | | | ECTS |
| NAE02 - Knowleongineering. | dge and understa | anding: A systematic unde | rstanding | of the key aspects ar | nd concepts of t | heir br | anch c | of | 0,8 |
| 0 0 | s in engineering: | Ability to apply their know | ledge and | understanding in ana | alysing product, | proces | ss and | l | 2,36 |
| ethod engineeri | 0 | | - | - | | | | | |
| | | derstanding of the differe | | | | : | | | 0,64 1,4 |
| NAE14 - Practica | | ngineering: Ability to com | - | | 0 | 0 | | | 0,8 |
| AF15 - Practica | | ingineering. Onderstandin | g of applied | | | | | | -,- |
| NAE15 - Practica | | | | | | | | Total: | 6 |
| NAE15 - Practica | | | | | | | | | |
| NAE15 - Practica | | SECONDA | RY LEA | RNING RESULT | S | | | | |
| NAE15 - Practica | | SECONDA | RY LEA | RNING RESULT | S | | | | |
| | _ | SECONDA | RY LEA | RNING RESULT | S | _ | | | |
| NAE15 - Practica | em) | SECONDA | RY LEA | RNING RESULT | S | | | | |
| | em) | SECONDA | RY LEA | RNING RESULT | S | | | | |
| 1RGD290 (1 se | · | SECONDA | RY LEA | RNING RESULT | Сн | | лсн | TI | 4 |
| 1RGD290 (1 se LEARNING AC | TIVITIES | SECONDA | | | СН | | VCH 3 h. | <u>– 11</u> 3 | |
| 1RGD290 (1 se LEARNING AC Carrying out/res | TIVITIES solving projects/c | | provide solu | utions to problems in | СН | | - | | |
| 1RGD290 (1 se LEARNING AC Carrying out/res | TIVITIES solving projects/c contexts, real ar | hallenges/cases, etc. to p | provide solu | utions to problems in | сн | | - | | |
| 1RGD290 (1 se LEARNING AC Carrying out/res interdisciplinary EVALUATION 3 Presentation an | TIVITIES solving projects/c contexts, real ar SYSTEM d defence of exe | hallenges/cases, etc. to p nd/or simulated, individual ercises, case studies, | provide solu Ily and/or ir | utions to problems in h teams | сн | 3 | 3 h. | | |
| 1RGD290 (1 se LEARNING AC Carrying out/res interdisciplinary EVALUATION Presentation an computer practi | TIVITIES solving projects/c contexts, real ar SYSTEM d defence of exe cal work, simulat | hallenges/cases, etc. to p nd/or simulated, individual ercises, case studies, ion practical work, | provide solu lly and/or ir W | utions to problems in h teams | сн ANISMS | 3 | 3 h. | | |
| 1RGD290 (1 se LEARNING AC Carrying out/res interdisciplinary EVALUATION Presentation an computer practi laboratory pract | TIVITIES solving projects/c contexts, real ar SYSTEM d defence of exe cal work, simulat ical work, term p | hallenges/cases, etc. to p nd/or simulated, individual ercises, case studies, | provide solu lly and/or ir W | utions to problems in h teams | сн ANISMS | 3 | 3 h. | | |
| 1RGD290 (1 se LEARNING AC Carrying out/res interdisciplinary EVALUATION Presentation an computer practi laboratory pract | TIVITIES solving projects/c contexts, real ar SYSTEM d defence of exe cal work, simulat ical work, term p | hallenges/cases, etc. to p nd/or simulated, individual ercises, case studies, ion practical work, rojects, end of degree | provide solu lly and/or ir W | utions to problems in h teams | сн ANISMS | 3 | 3 h. | | |
| 1RGD290 (1 se LEARNING AC Carrying out/res interdisciplinary EVALUATION Presentation an computer practi laboratory pract | TIVITIES solving projects/c contexts, real ar SYSTEM d defence of exe cal work, simulat ical work, term p s thesis, challenc | hallenges/cases, etc. to p nd/or simulated, individual ercises, case studies, ion practical work, rojects, end of degree | provide solu lly and/or ir W | utions to problems in h teams | сн ANISMS | 3 | 3 h. | | |





TH - Total hours: 3 h.

| (1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, | | | | | |
|--|--|---|---|---|-----------------------|
| 1RGD291 (1 sem) | | | | | |
| LEARNING ACTIVITIES | | | СН | NCH | ТН |
| Carrying out/resolving projects/challenges/cases, etc. to p | | | • | 3 h. | 3 h. |
| interdisciplinary contexts, real and/or simulated, individua | | | | | |
| EVALUATION SYSTEM | 100% | MAKE-UP MECHANI | | aniamal | |
| Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems | 100 % | | (No mech | anisnis) | |
| CH - Class hours: 0 h. ICH - Non-class hours: 3 h. 'H - Total hours: 3 h. | | | | | |
| 1RGD293 (1 sem) | | | | | |
| LEARNING ACTIVITIES | | | СН | NCH | тн |
| Carrying out/resolving projects/challenges/cases, etc. to p interdisciplinary contexts, real and/or simulated, individua | | | 1 h. | 2 h. | 3 h. |
| EVALUATION SYSTEM | W | MAKE-UP MECHANI | SMS | | |
| computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems CH - Class hours: 1 h. ICH - Non-class hours: 2 h. TH - Total hours: 3 h. | | | | | |
| | | | | | |
| | junto mec | cánico y sus piezas (me | | | |
| LEARNING ACTIVITIES | | | etálicas y ma CH 27 h. | ateriales plási NCH 30 h. | ticos) TH 57 h. |
| LEARNING ACTIVITIES Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experir | ns, audiovis | sual material, etc. on | сн | ИСН | тн |
| LEARNING ACTIVITIES Development and writing of records, reports, presentation | ns, audiovis nental inve | sual material, etc. on stigations carried out | СН 27 h. | ИСН | тн |
| LEARNING ACTIVITIES Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experir individually and/or in teams Conducting tests, giving presentations, presenting defence checkpoints | ns, audiovis nental inve | sual material, etc. on stigations carried out examinations and/or doir | <u>СН</u> 27 h. ng 3 h. | ИСН | <i>TH</i> 57 h. |
| LEARNING ACTIVITIES Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams Conducting tests, giving presentations, presenting defence checkpoints EVALUATION SYSTEM Reports on the completion of exercises, case studies, | ns, audiovis nental inve ces, taking (| sual material, etc. on stigations carried out | CH 27 h. ng 3 h. SMS etion of exer exercises, la | NCH 30 h. cises, case stu boratory exerc | TH 57 h. 3 h. |
| Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experin individually and/or in teams Conducting tests, giving presentations, presenting defend checkpoints EVALUATION SYSTEM Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory | ns, audiovis nental inve ces, taking o <u>W</u> | sual material, etc. on stigations carried out examinations and/or doir MAKE-UP MECHANI Reports on the comple exercises, simulation | CH 27 h. ng 3 h. SMS etion of exer exercises, la | NCH 30 h. cises, case stu boratory exerc | TH 57 h. 3 h. |



| EARNING ACTIVITIES | | | СН | NCH | ТН |
|--|--------------|------------------------|---------------------|--------------------|-------------------|
| carrying out/resolving projects/challenges/cases, etc. to terdisciplinary contexts, real and/or simulated, individu | | | 2 h. | 1 h. | 3 h. |
| VALUATION SYSTEM | W | MAKE-UP MECHAN | IISMS | | |
| eports on the completion of exercises, case studies, omputer exercises, simulation exercises, laboratory xercises, term projects, challenges and problems | 100% | | (No mech | anisms) | |
| - Total hours: 3 h. | | | | | |
| | | | | | |
| EARNING ACTIVITIES | | | СН | псн | тн |
| EARNING ACTIVITIES Conducting tests, giving presentations, presenting defer | nces, taking | examinations and/or do | | NCH 2 h. | <i>ТН</i> 3 h. |
| EARNING ACTIVITIES Conducting tests, giving presentations, presenting defer theckpoints EVALUATION SYSTEM | w | examinations and/or do | ing ^{1 h.} | 2 h. | |
| LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defer checkpoints EVALUATION SYSTEM ndividual written and/or oral tests or individual | - | | ing ^{1 h.} | 2 h. | |
| IRGD294 (1 sem) LEARNING ACTIVITIES Conducting tests, giving presentations, presenting defer checkpoints EVALUATION SYSTEM Individual written and/or oral tests or individual coding/programming tests | w | | ing ^{1 h.} | 2 h. | |

| LEARNING ACTIVITIES | | | •••• | | |
|---|-------------|--|-------|---------------|-------|
| Development and writing of records, reports, presentation projects/work experience/challenges/case studies/experient individually and/or in teams | | | 32 h. | 40 h. | 72 h. |
| Conducting tests, giving presentations, presenting defend checkpoints | ces, taking | examinations and/or doing | g 3h. | | 3 h. |
| EVALUATION SYSTEM | W | MAKE-UP MECHANIS | MS | | |
| Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems | 40% | Individual written and/o coding/programming te | | or individual | |
| Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems | 20% | | | | |
| Individual written and/or oral tests or individual coding/programming tests | 40% | | | | |
| CH - Class hours: 35 h. NCH - Non-class hours: 40 h. TH - Total hours: 75 h. | | | | | |





CONTENTS

Mechanical assembly:3 mechanical assemblies will be worked on:Mechanical elements, dimensioning and toler ances.Representation of partssurfaces

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources
[!] Apuntes de la asignatura

Bibliography http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_ln k.pl?grupo=DISINDUSTRIAL&ejecuta=15