

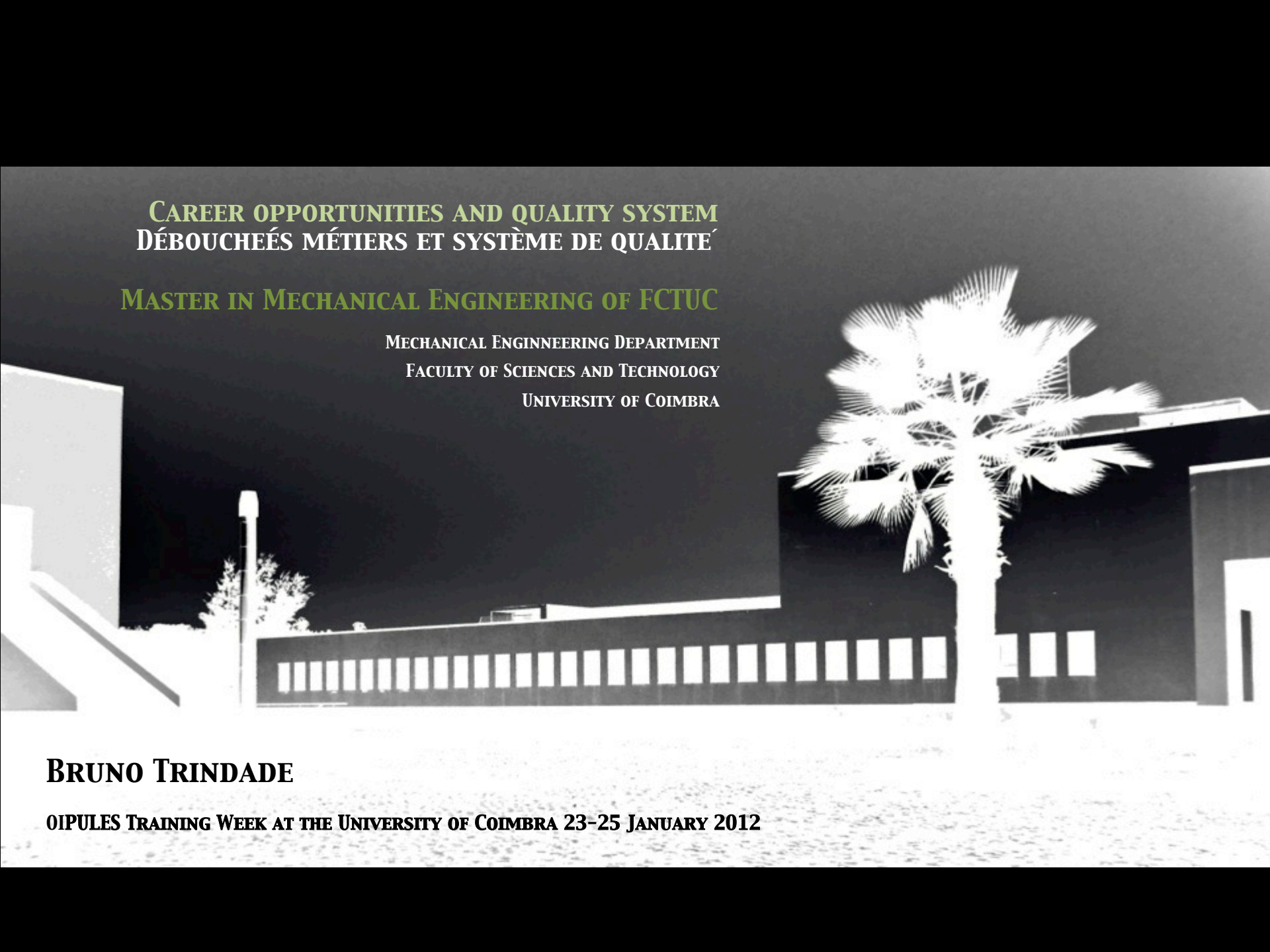
**CAREER OPPORTUNITIES AND QUALITY SYSTEM**  
**DÉBOUCHEÉS MÉTIERS ET SYSTÈME DE QUALITÉ**

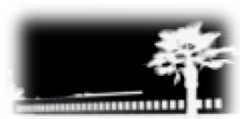
**MASTER IN MECHANICAL ENGINEERING OF FCTUC**

**MECHANICAL ENGINEERING DEPARTMENT**  
**FACULTY OF SCIENCES AND TECHNOLOGY**  
**UNIVERSITY OF COIMBRA**

**BRUNO TRINDADE**

**OIPULES TRAINING WEEK AT THE UNIVERSITY OF COIMBRA 23-25 JANUARY 2012**

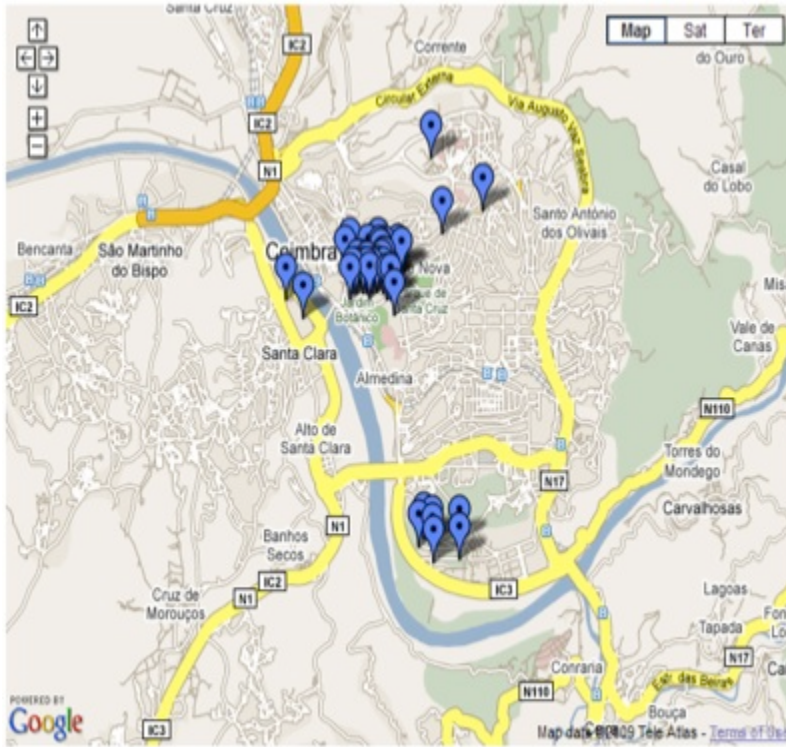
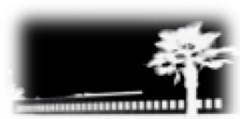




## **SUMMARY**

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- **UNIVERSITY OF COIMBRA / FCTUC**
- **MECHANICAL ENGINEERING DEPARTMENT (DEM)**
  - **STAFF, EDUCATION, SCIENCE**
  - **INTEGRATED MASTER IN MECHANICAL ENGINEERING**
  - **CARREAR OPPORTUNITIES**
  - **QUALITY SYSTEM**

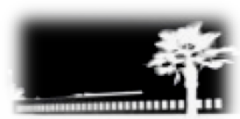


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**HUMANITIES, LAW, MEDICINE,  
SCIENCE AND TECHNOLOGY,  
FARMACY, ECONOMICS, PSYCHOLOGY  
AND EDUCATION SCIENCES, SPORT  
SCIENCES AND PHYSICAL EDUCATION**





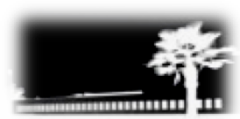
**THE DEPARTMENT OF MECHANICAL ENGINEERING WAS CREATED IN 1972.  
SINCE 1995, IT IS SITUATED IN POLO II OF THE UNIVERSITY OF COIMBRA**



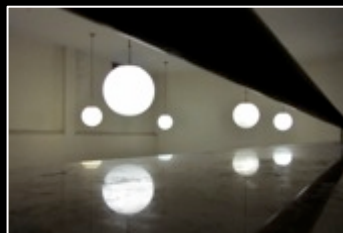
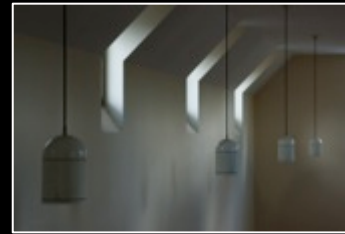
**RUA LUÍS REIS SANTOS, PÓLO II DA U.C. 3030-788 COIMBRA**

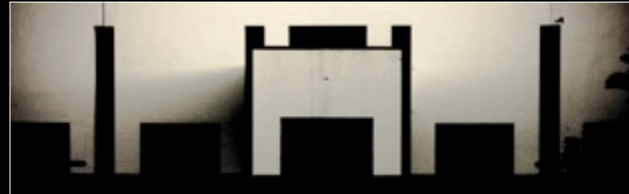
**TEL: 239790700, FAX: 239790701**

**[WWW.DEM.UC.PT](http://WWW.DEM.UC.PT)**



w w w . d e m . u c . p t





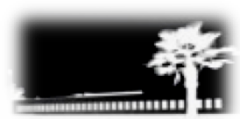
**S T A F F**

**4 0 . P R O F E S S O R S**

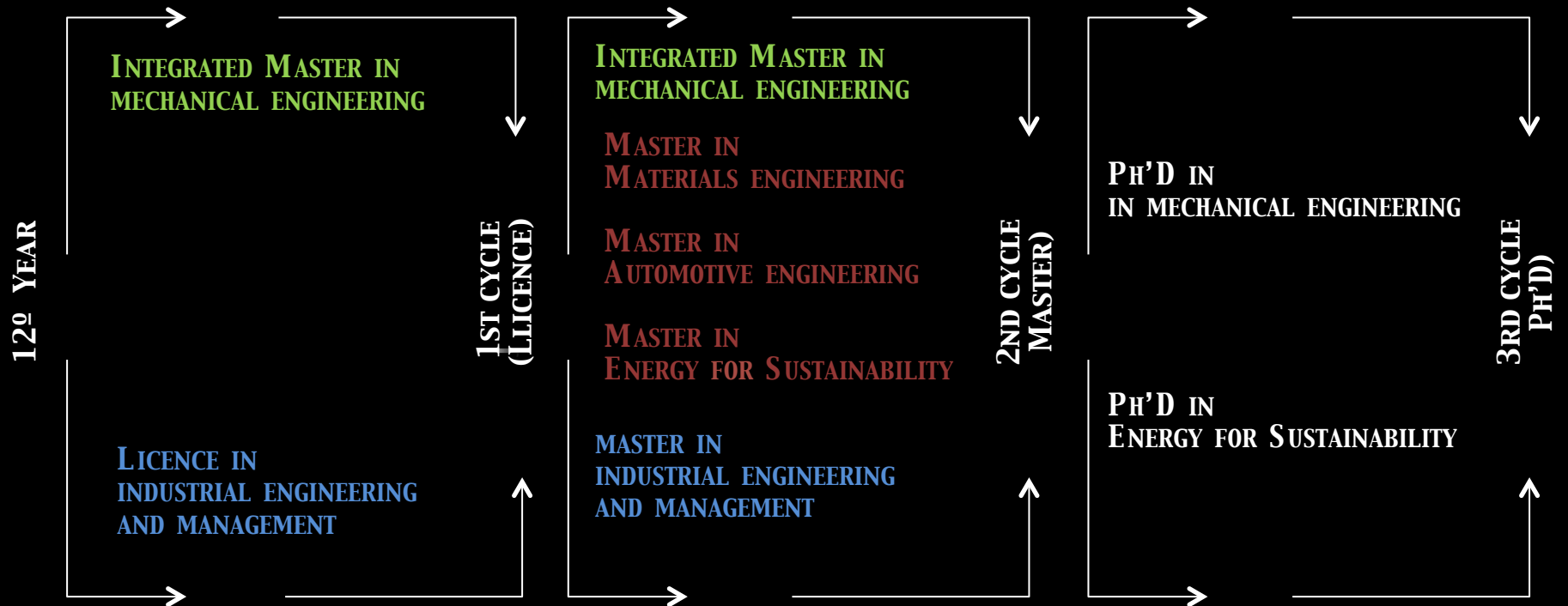
*7 CATEDRÁTICOS, 8 ASOCIADOS, 25 AUXILIARES*

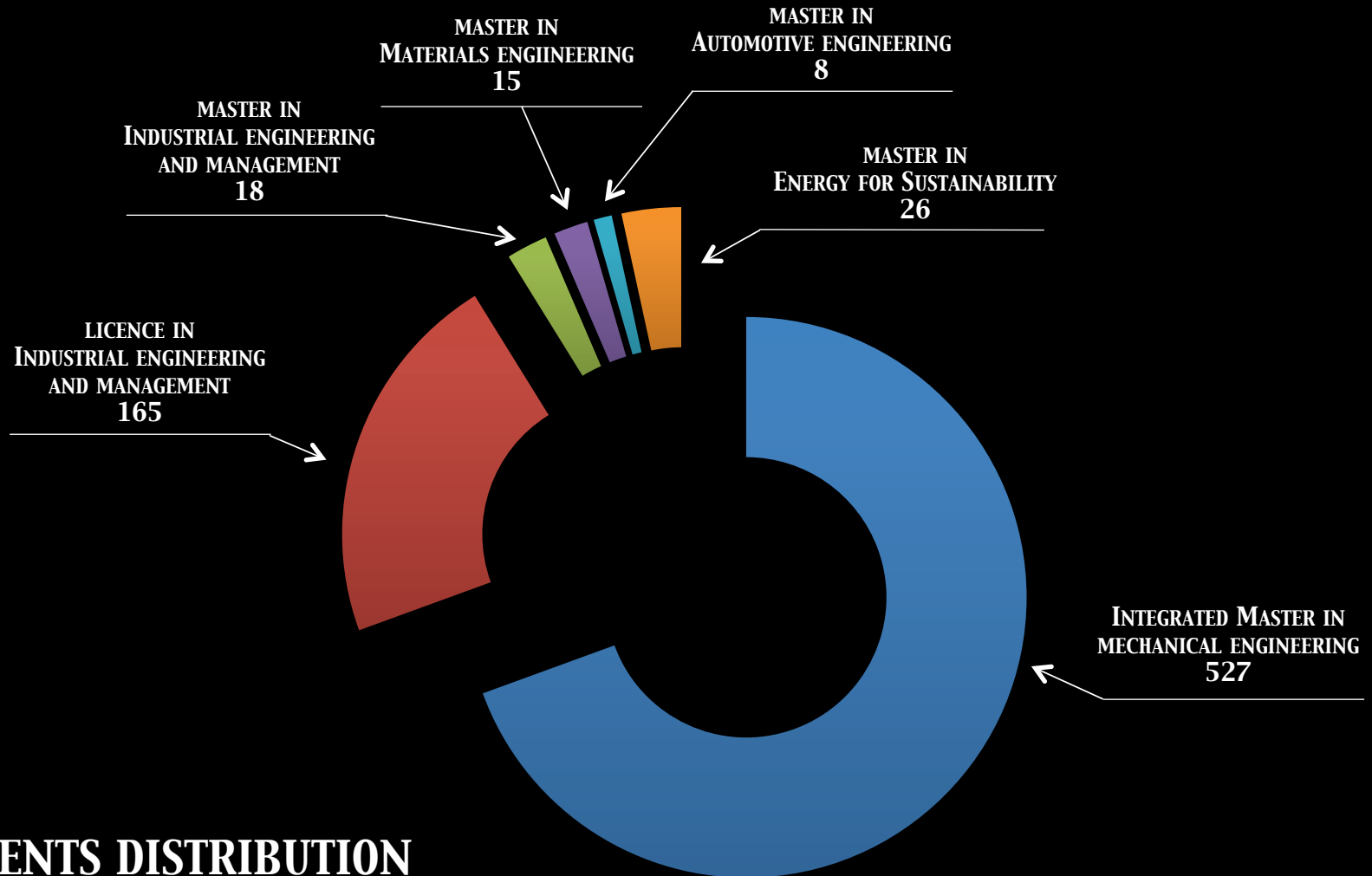
**1 1 . N O N A C A D E M I C**

**7 9 3 . S T U D E N T S**



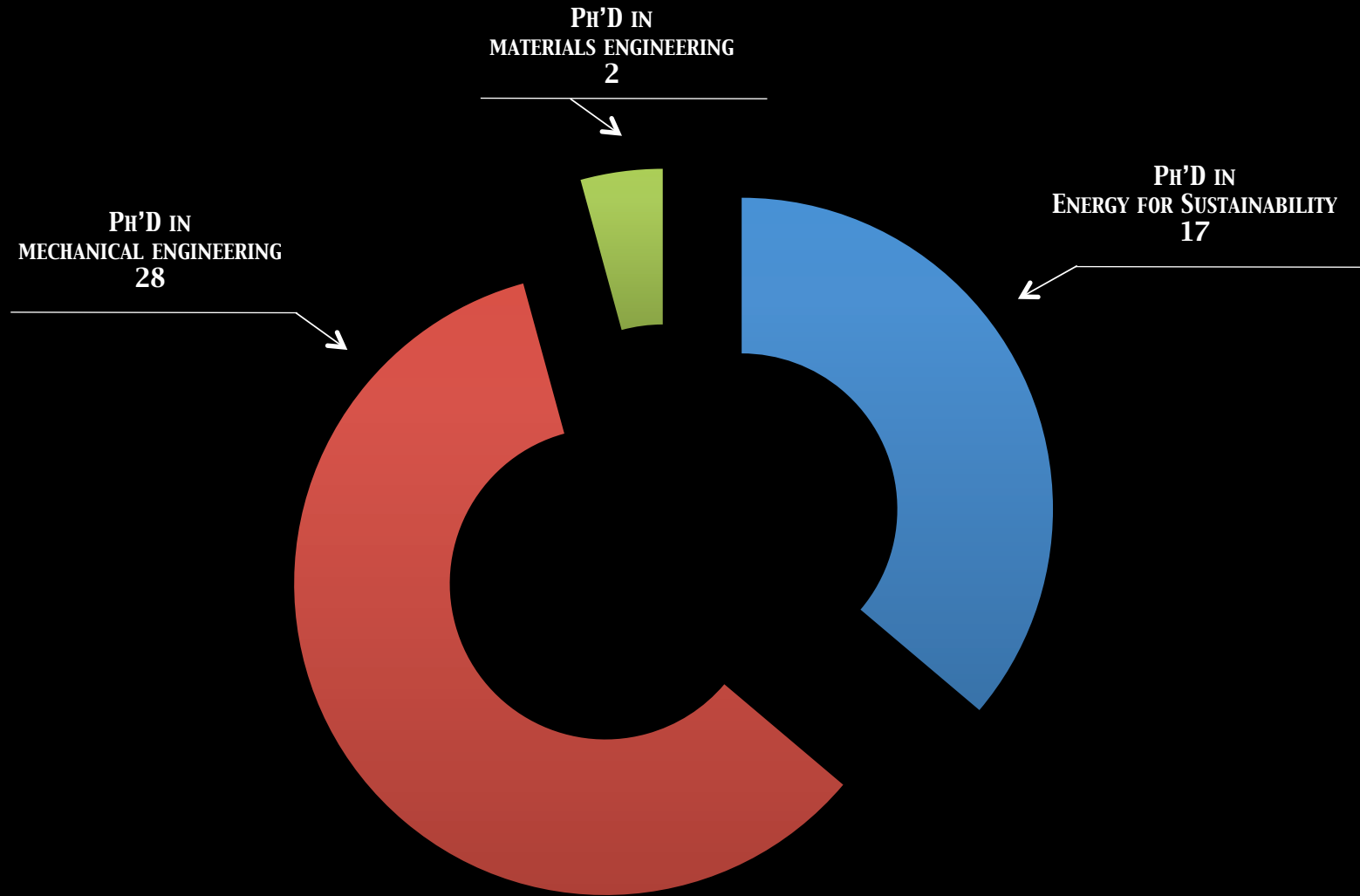
# COURSES OF DEM



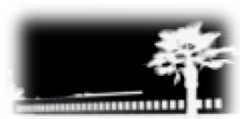


**STUDENTS DISTRIBUTION**  
(1<sup>ST</sup> AND 2<sup>ND</sup> CYCLES)





**STUDENTS DISTRIBUTION**  
(3RD CYCLE)



## 2 RESEARCH CENTERS



**CENTRO DE ENGENHARIA MECÂNICA DA UNIVERSIDADE DE COIMBRA**

EVALUATED AS EXCELLENT IN THE LAST THREE EVALUATIONS (1999, 2003 AND 2007)

23 PROFESSORS OF DEM

80 PH'D

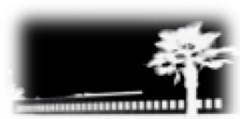
[HTTP://TV.UP.PT/VIDEOS/JIB73ZBA](http://tv.up.pt/videos/jib73zba)



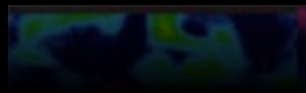
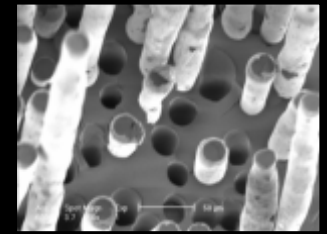
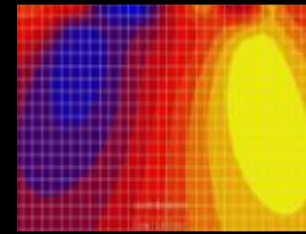
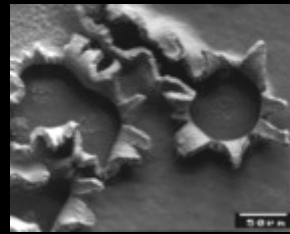
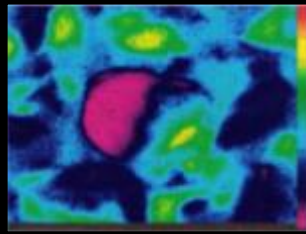
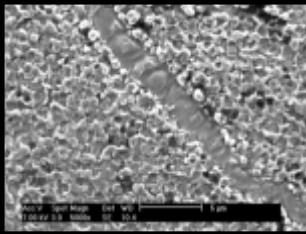
**ASSOCIAÇÃO PARA O DESENVOLVIMENTO PARA A AERODINÂMICA INDUSTRIAL**

EVALUATED AS VERY GOOD

17 PROFESSORS OF DEM



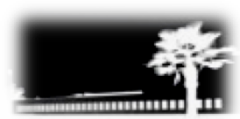
# CEMUC



## RESEARCH AREAS

**EXPERIMENTAL AND COMPUTER AIDED TECHNOLOGY | INDUSTRIAL ROBOTICS AND MANAGEMENT | STRUCTURAL INTEGRITY | NANOMATERIALS AND MICROMANUFACTURING | SENSORS AND NANO-ELECTROCHEMISTRY | SURFACE ENGINEERING**





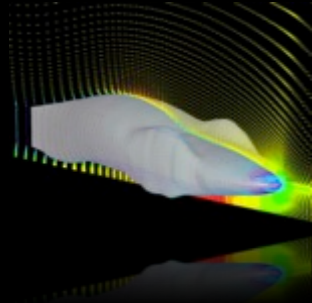
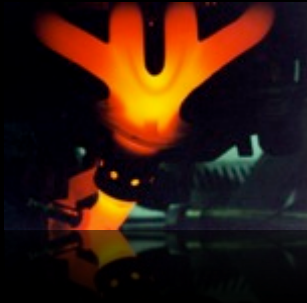
# CEMUC

## SOME ONGOING FINANCED PROJECTS

<b>TITLE</b>	<b>FUNDING</b>
<b>TAILORING OF TRIBOLOGICAL INTERFACES FOR CLEAN AND ENERGY-EFFICIENT DIESEL AND GASOLINE POWER TRAINS</b>	<b>255.680,00</b>
<b>FUNCTIONALITIES OF BISMUTH-BASED NANOSTRUCTURES</b>	<b>5.323.682,00</b>
<b>EUROPEAN CLEARING HOUSE FOR OPEN ROBOTICS DEVELOPMENT</b>	<b>25.1590,460,00</b>
<b>DEVELOPMENT OF ANTI-MICROBIAL MULTIFUNCTIONAL-COATINGS FOR ORTHOPAEDIC DEVICES</b>	<b>119.500,00</b>
<b>NANOCOMPOSITE DECORATIVE COATINGS OF METAL "CLUSTERS" DISPERSED IN A DIELECTRIC MATRIX</b>	<b>150.000,00</b>
<b>NEW PRODUCTION TECHNOLOGY FOR LA9.33(SI/GE)602 ELECTROLYTES FOR IT-SOFCs</b>	<b>120.000,00</b>
<b>ENHANCED OF MECHANICAL PROPERTIES ON SPECIAL MODIFIED NANOCLAYED COMPOSITES</b>	<b>76.000,00</b>
<b>JOINING MICRO TO SMALL SCALE SYSTEMS IN SHAPE MEMORY ALLOYS USING LAST GENERATION INFRARED LASERS</b>	<b>160.000,00</b>
<b>NAGATA PATCH DESCRIPTIZATION TOWARD CONTINUOUS TREATMENT OF CONTACT WITH FRICTION</b>	<b>70.000,00</b>
<b>METAL-ALLOYED C-BASED COATINGS IN LUBRIFIED SLIDING CONTACT</b>	<b>150.000,00</b>
<b>NUMERICAL ANALYSIS AND MODELLING OF HEAT TREATMENTS ON METALLIC GEOMETRICALLY COMPLEX PARTS</b>	<b>40.000,00</b>
<b>CLINICAL AND BIOMECHANICAL ASSESSEMENT OF DENTAL IMPLANTS SUBMITTED TO PLATFORM SWITCHING</b>	<b>174.108,00</b>
<b>TILES WITH IMPROVED THERMAL AND STRUCTURAL BEHAVIOR BY THE INCORPORATION OF NANOMATERIALS</b>	<b>153.370,00</b>

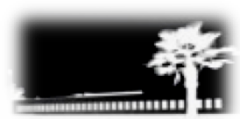


# ADA I



## RESEARCH AREAS

ENERGY, ENVIRONMENT AND COMFORT  
FOREST FIRE AND DETONICS



# ADAI

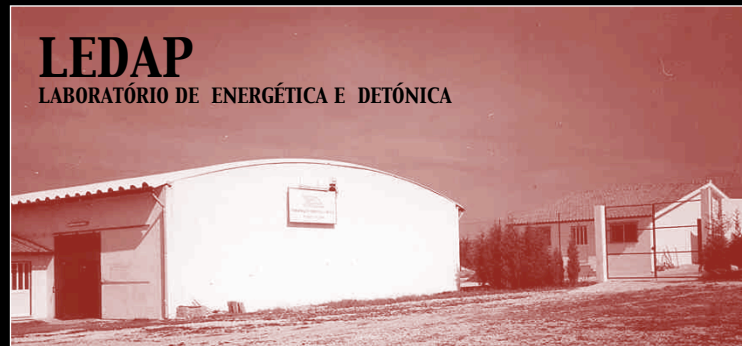
## SOME ONGOING FINANCED PROJECTS

<b>TITLE</b>	<b>FUNDING</b>
<b>BIOFUEL SYSTEMS FOR TRANSPORTATION IN PORTUGAL: AN "WELL-TO-WHEELS" INTEGRATED MULTI-OBJECTIVE ASSESSMENT</b>	<b>145.000,00</b>
<b>CAPTURING UNCERTAINTY IN BIOFUELS FOR TRANSPORTATION. RESOLVING ENVIRONMENTAL PERFORMANCE AND ENABLING IMPROVED USE</b>	<b>198.758,00</b>
<b>INFLUENCE OF THE TRANSIT OF VEHICLES ON THE QUALITY OF URBAN ENVIRONMENT</b>	<b>188.000,00</b>
<b>ANALYSIS OF SPOTTING MECHANISM IN FOREST FIRE PROPAGATION</b>	<b>136.220,00</b>
<b>PREDICTION OF EXTREME FOREST FIRE BEHAVIOR</b>	<b>138.000,00</b>



**ADAI**  
LABORATÓRIO DE AERODINÂMICA INDUSTRIAL

**A S S O C I A T E D  
L A B O R A T O R I E S  
( C E M U C A N D A D A I )**



**LEDAP**  
LABORATÓRIO DE ENERGÉTICA E DETÓNICA



**IPN**  
INSTITUTO PEDRO NUNES



**LEIF**  
LABORATÓRIO DE INCÊNDIOS FLORESTAIS

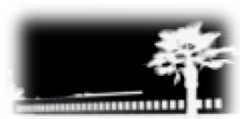




# EXAMPLE OF INVESTIGATION WITH STRONG INTERVENTION OF STUDENTS



**ECOVEÍCULO IS AN EXCELLENT EXAMPLE OF FORMATIVE CAPACITY AND THE COMPLETION OF DEM. ONE OF THOSE EXAMPLES WHERE WE SHOW THE QUALITY OF OUR EDUCATION, THE QUALITY OF OUR RESEARCH AND DEVELOPMENT AND HOW WE INVOLVE STUDENTS IN RESEARCH ACTIVITIES OF OUR DEPARTMENT .**



# **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING**

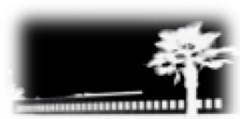
## **CREATING A HIGH EDUCATION COURSE (CRÉATION D'UN DIPLÔME D'ÉTUDES )**

---

### **ELABORATION OF A COMPLEX DOSSIER TO BE SENT TO THE MINISTRY OF EDUCATION**

#### **THE DOSSIER MUST CONTAIN:**

- **REPORT SIGNED BY THE PEDAGOGICAL AND SCIENTIFIC BODY OF THE SCHOOL**
- **THE OBJECTIVES OF THE COURSE;**
- **JUSTIFICATION FOR THE NUMBER OF CREDITS ASSIGNED TO EACH SUBJECT (ESTIMATED ON THE BASIS OF THE STUDENTS WORK NEEDED (STUDENTS AND TEACHERS SURVEYS))**
- **JUSTIFICATION FOR TOTAL NUMBER OF CREDITS ASSIGNED TO THE COURSE**
- **DEMONSTRATION OF THE SUITABILITY OF THE ORGANIZATION OF THE COURSE AND TEACHING METHODOLOGIES FOR:**
  - THE ACQUISITION OF SKILLS IN EACH SUBJECT**
  - THE OBJECTIVES OF THE COURSE**
  - THE MARKET LABOR (EMPLOYER'S SURVEY)**
- **A COMPARATIVE ANALYSIS BETWEEN THE ORGANIZATION ESTABLISHED FOR THE COURSE AND THE ONE OF REFERENCE COURSES WITH SIMILAR OBJECTIVES IN EUROPE**



# INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING

## CREATING A GRADUATE COURSE (CRÉATION D'UN DIPLÔME D'ÉTUDES )

---

**MASTER IN MECHANICAL ENGINEERING CREATED ACCORDING TO THE DECRET LAW 76\_2006 (ACADEMIC DEGREES AND DIPLOMAS OF HIGHER EDUCATION IN THE BOLONHA SYSTEM)**

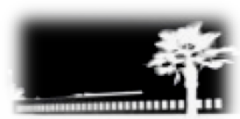
**5 YEARS COURSE (3+2)**

- **FIRST 3 YEARS (1ST CYCLE WITH 180 ECTS)**

**1 ECTS = 27 HOURS OF WORK**

<b>Unidades curriculares/ Curricular Units</b>	<b>Área Científica/ Scientific Area (1)</b>	<b>Tipo/ Type (2)</b>	<b>Horas de trabalho/ working hours</b>	<b>Horas de Contacto/ Contact hours (3)</b>	<b>ECTS</b>
<b>Ciência e Engenharia de Materiais II <i>Materials Science and Engineering II</i></b>	<b>CE</b>	<b>Semestral <i>Semester</i></b>	<b>162,0</b>	<b>T=30; TP=30; OT=10</b>	<b>6,0</b>

**BACHELOR IN SIENCE OF MECHANICAL ENGINEERING**



# **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING**

## **CREATING A GRADUATE COURSE (CRÉATION D'UN DIPLÔME D'ÉTUDES )**

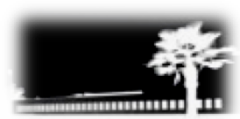
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**5 YEARS COURSE (3+2)**

- **LAST 2 YEARS (2ST CYCLE WITH 120 ECTS)**

**SPECIALIZATION COURSE (90 ECTS) + THESIS (30 ECTS)**

**MASTER IN MECHANICAL ENGINEERING**



## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING**

### **ENTRANCE REQUIREMENTS (RECONNAISSANCE DE LA FORMATION ACQUIE)**

---

**ACCESS TO THE MASTER IN MECHANICAL ENGINEERING CAN BE DONE WITH THE FOLLOWING PRIOR LEARNING:**

- **12TH GRADE WITH FINAL EXAMS OF MATHEMATICS AND PHYSICS**
- **HOLDERS OF A DIPLOMA OF TECHNOLOGICAL SPECIALIZATION (CET)**
- **HOLDERS OF A HIGH EDUCATION COURSE**
- **INDIVIDUALS AGED OVER 23 YEARS SUCCESSFULLY CONDUCTING APPROPRIATE TESTS SPECIFICALLY DESIGNED TO EVALUATE THE ABILITY TO ATTEND HIGHER EDUCATION**



## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING** **MARKETING ACTIONS (ACTIONS MARKETING)**

---

**1<sup>ST</sup> CYCLE COURSES (AND INTEGRATED MASTERS) ARE REPORTED / PUBLISHED IN/BY THE:**

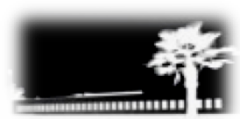
- **OFFICIAL PAGE OF THE FCTUC / DEM**
- **NATIONAL MEDIA**
- **SCIENCE FAIRS**
- **INFORMATION / TRAINING IN HIGH-SCHOOLS (MOSTLY REGIONAL)**

**... AND WHAT ABOUT THE RESULT OF SUCH ACTIONS ?**

**INTEGRATED MASTER IN MECHANICAL ENGINEERING 2011/12**

**112 CANDIDATES (AS FIRST CHOICE) FOR 88 VACANCIES (INDEX OF SATISFACTION =1.27)**

**THE BEST STUDENTS**



## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING** **MARKETING ACTIONS (ACTIONS MARKETING)**

---

**2<sup>ST</sup> CYCLE COURSES ARE REPORTED / PUBLISHED IN/BY THE:**

- **OFFICIAL PAGE OF THE FCTUC / DEM**
- **NATIONAL MEDIA**
- **NATIONAL SCIENCE FAIRS**
- **LOCAL INDUSTRIAL FAIRS**
- **INFORMATION AT THE UNIVERSITY**



## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING (2012/13)**

---

- **5 YEARS COURSE (10 SEMESTERS - 300 ECTS) THAT CONFERS THE MASTER DEGREE**
- **TWO AREAS OF EXPERTISE: PRODUCTION AND DESIGN AND ENERGY AND ENVIRONMENT**
- **COMMON CORE CURRICULUM IN THE FIRST FOUR YEARS AND A SPECIFIC CURRICULUM IN FIFTH YEAR**



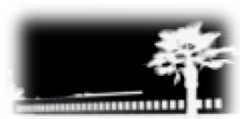


## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING (2012/13)**

---

**THE SECOND SEMESTER OF THE FIFTH YEAR CURRICULUM IS DEVOTED TO THE MASTER'S THESIS IN BOTH BRANCHES.**

**STUDENTS MUST PERFORM AN INNOVATIVE RESEARCH WORK WITH SCIENTIFIC SUPERVISION OF A PROFESSOR OF THE DEPARTMENT OF MECHANICAL ENGINEERING. THIS WORK CAN BE DONE IN RESEARCH CENTERS OF THE FCTUC OR IN OTHER LABORATORIES ASSOCIATED TO FCTUC, OR IN THE INDUSTRY. AT THE END OF THE COURSE, THE STUDENTS PRESENT THEIR WORK IN A PUBLIC DEFENSE OF THE DISSERTATION REQUIRED FOR OBTAINING THE FINAL QUALIFICATION.**

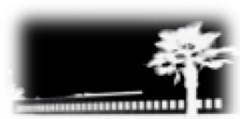


## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING**

### **OBJECTIVES (OBJECTIFS)**

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- **TO TRAIN MECHANICAL ENGINEERS CRUCIAL IN THE COUNTRY'S TECHNOLOGICAL DEVELOPMENT, WITH CAPACITY TO INNOVATE.**
- **OUR ENGINEERS COMBINE A SOLID BASE WITH A CUTTING-EDGE APPLIED TECHNOLOGY TRAINING, ONLY POSSIBLE TO TEACH IN SCHOOLS THAT PROMOTE RESEARCH EXCELLENCE, SUCH AS THE DEPARTMENT OF MECHANICAL ENGINEERING FCTUC (2 RESEARCH CENTRES CLASSIFIED AS EXCELENT AND VERY GOOD)**
- **TO FORM MECHANICAL ENGINEERS WITH SKILLS IN THIS AREA OF KNOWLEDGE, ABLE TO DEVELOP ACTIVITIES IN THE INDUSTRY, SERVICES OR RESEARCH.**
- **THEY MUST BE ABLE TO SOLVE PROBLEMS IN MECHANICAL ENGINEERING IN ITS VARIOUS FORMS AND TO ADAPT THEMSELVES TO MULTIDISCIPLINARY TEAMS OF RELATED AREAS. THEY MUST ALSO MEET THE SKILLS TO PURSUE FURTHER EDUCATION (3RD CYCLE).**



# **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING**

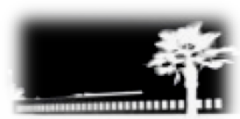
## **OBJECTIVES (OBJECTIFS)**

---

**IN ORDER TO ACHIEVE THESE OBJECTIVES, THE INTEGRATED MSC IN MECHANICAL ENGINEERING CONSISTS OF SEVERAL AREAS OF TRAINING IN THE BEGINNING, MIDDLE AND END OF THE COURSE LINE, SUCH AS:**

- BASIC SCIENCES**
- GENERIC ENGINEERING SCIENCES**
- MECHANICAL ENGINEERING SCIENCES**
- COMPLEMENTARY SCIENCES**
- INTEGRATION AREAS**

**THE FIFTH YEAR IS DIVIDED INTO TWO MAJOR AREAS OF EXPERTISE: "PRODUCTION AND DESIGN" AND "ENERGY AND ENVIRONMENT".**



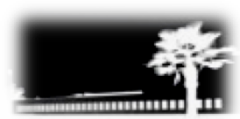
# INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING

## SCIENTIFIC AREAS AND CREDITS (DOMAINES SCIENTIFIQUES ET CRÉDITS)

### DISTRIBUTION OF ECTS IN THE "PRODUCTION AND DESIGN" AREA OF EXPERTISE

Produção e Projeto / *Production and Design*

Área Científica/ Scientific Area	SIGLA/ Acronym	ECTS Obrigatórios/ Mandatory ECTS	ECTS Optativos*/ Optional ECTS*
Ciências Básicas <i>Basic Sciences</i>	CB	64,5	
Ciências de Engenharia <i>Engineering Sciences</i>	CE	85,5	3-9
Ciências de Engenharia Mecânica <i>Mechanical Engineering Sciences</i>	CEM	108	12-18
Ciências Complementares <i>Complementary Sciences</i>	CC	15	
Áreas de Integração <i>Integration Areas</i>	AI	6	
<b>TOTAL</b>		279	21



## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING EXAMINATION REGULATIONS, ASSESSMENTS AND GRADING**

---

**THERE ARE VARIOUS EVALUATION RULES, ACCORDING TO THE TYPE OF SUBJECTS.**

**BY LAW, THERE ARE TWO POSSIBLE EXAMS: THE REGULAR EXAM AND THE SECOND EXAM (APPEAL EXAM) THAT TAKE PLACE IN THIS ORDER AFTER THE 15 WEEKS OF TEACHING OF EACH SEMESTER.**

**MANY DISCIPLINES HAVE CONTINUOUS EVALUATION THAT MAY BE MORE PRACTICAL OR MORE THEORETICAL. HOME WORKING IS ALSO A COMMON FORM OF CONTINUOUS EVALUATION .**

**FINAL GRADING IS TRANSLATED INTO A SCALE OF 0 TO 20.**



# INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING

## FUC (COURSE UNIT FORM) (FICHE CURRICULAIRE)

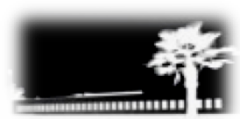
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FICHA DE UNIDADE CURRICULAR (FUC)

**COURSE UNIT TITLE:** MATERIALS SCIENCE AND ENGINEERING II

**- INFORMATION ON:**

- COURSE UNIT TITLE
- RESPONSIBLE ACADEMIC STAFF MEMBER
- RECOMMENDED PREREQUISITES
- LANGUAGE(S) OF INSTRUCTION
- OBJECTIVES OF THE CURRICULAR UNIT AND COMPETENCIES
- SYLLABUS
- DEMONSTRATION OF THE SYLLABUS COHERENCE WITH THE CURRICULAR UNIT'S OBJECTIVES
- TEACHING METHODOLOGIES (INCLUDING EVALUATION)
- DEMONSTRATION OF THE TEACHING METHODOLOGIES COHERENCE WITH THE CURRICULAR UNIT'S OBJECTIVES
- MAIN BIBLIOGRAPHY



## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING** **PROFESSIONAL GOALS (OBJECTIFS PROFESSIONNELS)**

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**THE CAREER OPPORTUNITIES FOR HOLDERS OF THE MASTER'S DEGREE IN MECHANICAL ENGINEERING ARE, PROBABLY, THE MOST COMPREHENSIVE IN THE ENGINEERING JOB MARKET IN PORTUGAL.**

**MECHANICAL ENGINEERS, AS PROFESSIONALS WHO CAN WORK IN CONCEPTUALIZATION, PROJECT DESIGN, MANUFACTURE, MAINTENANCE, MANAGEMENT AND CONSULTANCY, EASILY FIND A JOB IN COMPANIES OF ALMOST ALL ECONOMIC SECTORS.**

**MECHANICAL ENGINEERS WHO GRADUATED AT FCTUC ARE EMPLOYABLE.**

**IN A RECENT SURVEY CARRIED OUT TO DEM / FCTUC ALUMNI, 90% HAD FOUND A JOB IN LESS THAN ONE MONTH AFTER COMPLETION OF THE COURSE.**



## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING PROFESSIONAL STATUS (STATUT PROFESSIONNEL)**

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**THE MASTER DEGREE IN MECHANICAL ENGINEERING / FCTUC GIVES ACCESS TO THE EXERCISE OF ENGINEERING ACTIVITIES IN INDUSTRY, SERVICES AND PUBLIC SECTOR.**

**IT IS RECOGNIZED BY THE PORTUGUESE COUNCIL OF ENGINEERING, WHICH IS THE ENTITY THAT GIVES THE NECESSARY ENGINEERING PROFESSIONAL CERTIFICATES.**

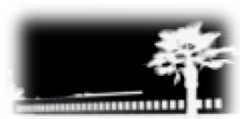




## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING EMPLOYMENT (EMPLOI)**

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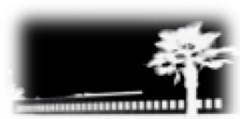
<b>AREAS OF EXPERTISE</b>	<b>%</b>
<b>ORGANIZATION AND INDUSTRIAL MANAGEMENT</b>	<b>30</b>
<b>PRODUCTION, PROCESSING AND ENERGY MANAGEMENT</b>	<b>23</b>
<b>HEATING, VENTILATION AND AIR CONDITIONING (HVAC)</b>	<b>14</b>
<b>INDUSTRIAL SAFETY</b>	<b>8</b>
<b>TRANSPORT AND ROADS</b>	<b>7</b>
<b>AERONAUTICAL ENGINEERING</b>	<b>5</b>
<b>HYDRAULICS AND WATER RESOURCES</b>	<b>4</b>
<b>SANITARY INDUSTRY</b>	<b>3</b>
<b>TELECOMMUNICATIONS</b>	<b>2</b>
<b>TEXTILE ENGINEERING</b>	<b>2</b>
<b>ACOUSTIC ENGINEERING</b>	<b>2</b>



## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING EMPLOYMENT (EMPLOI)**

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<b>DISTRIBUTION OF MECHANICAL ENGINEERS IN THE INDUSTRY</b>	<b>%</b>
<b>METALWORKING</b>	<b>33</b>
<b>TRANSPORT AND ROADS</b>	<b>23</b>
<b>ENERGY / HEATING, VENTILATION AND AIR CONDITIONING</b>	<b>22</b>
<b>EQUIPMENTS PRODUCTION</b>	<b>5</b>
<b>AERONAUTICS</b>	<b>4</b>
<b>FOUNDRY, PLASTICS AND MOLDS</b>	<b>4</b>
<b>CEMENT AND DERIVATIVES</b>	<b>3</b>
<b>CERAMICS AND GLASS</b>	<b>2</b>
<b>FOOD INDUSTRY ACTIVITY</b>	<b>2</b>
<b>FERTILIZERS</b>	<b>2</b>



## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING DISCLOSURE OF EMPLOYMENT (DIVULGATION DE L'EMPLOI)**

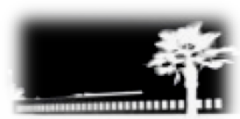
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### **1. OFFICIAL LIST OF COMPANIES INTERESTED IN GETTING STUDENTS FOR MASTER THESIS (5<sup>TH</sup> YEAR, 2<sup>ND</sup> SEMESTER)**

**A GOOD WORK IS USUALLY A GUARANTEE OF A FUTURE TRAINING AND EMPLOYMENT**

### **2. LIST OF JOB VACANCIES COORDINATED BY STUDENTS ASSOCIATION**

**[HTTP://NEEMAAAC.WORDPRESS.COM/](http://neemaaac.wordpress.com/)**



# **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING**

## **QUALITY SYSTEM (SYSTÈME DE QUALITÉ)**

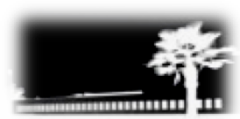
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### **NÓNIO INFORMATIC SYSTEM**

#### **INFOEESTUDANTE**

**THIS SYSTEM GIVES STUDENTS ALL THE INFORMATION RELATED TO COURSE SUBJECTS, SUCH AS:**

- ANNUAL REGISTRATION IN THE VARIOUS DISCIPLINES**
- INFORMATION ABOUT THE CONTENT OF THE SUBJECTS (PROGRAM, ABSTRACTS, SUPPORT MATERIALS, ATTENDANCE, ETC)**
- REGISTRATION IN EXAMS**
- SCHEDULES**
- REPORTS**
- PEDAGOGICAL SURVEYS**
- RESULTS OF EVALUATIONS**



# **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING**

## **QUALITY SYSTEM (SYSTÈME DE QUALITÉ)**

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### **NÓNIO INFORMATIC SYSTEM**

#### **INFODOCENTE**

**THIS SYSTEM OFFERS THE TEACHER MANAGEMENT OF THE COURSES GIVING STUDENTS ALL THE INFORMATION THEY NEED**





## **INTEGRATED STUDY CYCLE IN MECHANICAL ENGINEERING** **QUALITY SYSTEM (SYSTÈME DE QUALITÉ)**

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- **SELF-ASSESSMENT REPORTS (ANNUAL)**  
BY THE MASTER'S COORDINATOR
- **TEACHING SURVEYS (SEMESTRAL)**  
BY THE MASTER'S STUDENTS
- **EVALUATION OF THE MASTER**  
BY THE AGENCY FOR ASSESSMENT AND ACCREDITATION OF HIGHER EDUCATION - A3ES
- **EVALUATION OF THE SCIENTIFIC UNITS (EVERY 3 YEARS)**  
BY THE FCT/MEC - INTERNATIONAL EVALUATION COMMITTEE
- **CANDIDATURE EN 2012 AU EUR-ACE, EUROPEAN ACCREDITATION OF ENGINEERING PROGRAMMES**

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B I E N V E N U E

