

Pre-registration and fees:

Anyone interested in registering should complete a pre-registration form before 30th June 2013. This form is available from the course Secretary and must be handed in with a photocopy of the student's National Identity card or passport, as well as any academic transcripts and degree certificate/s. During the first half of July 2013, the Head of Studies will publish the list of admissions, which will be formalized once payment of the course deposit fee (€450, equating to 10% of the total course fee) has been confirmed in the CEDIP's Banco Sabadell account. This payment constitutes part of the first installment of the fee and will be deducted from the first installment in September.

Generally, those accepted onto the course will be required to pay course fees to the CEDIP in three installments, the first in September 2013 (50%), the second in November 2013 (25%) and the final installment in April 2014 (25%)

Management and coordination:

Prof. Dr. Francisco Miguel Martínez Verdú,
verdu@ua.es, <http://web.ua.es/gvc>

Studies Coordinator:

Prof. Dr. Valentín Viqueira Pérez, valentin.viqueira@ua.es



AUDI
SEAT
MERCEDES BENZ
OPEL
AZKO NOBEL COATINGS
GRUPO ANTOLÍN
GAIKER

Department of Optics –
University of Granada
Sensors, Instrumentation
and Systems Development
Center – Technical University
of Catalonia
Department of Paper and
Textile Chemistry – Technical
University of Valencia
Institute of Optics – High
Council of Scientific
Research (CSIC)

(logos constantly updated)

Universitat d'Alacant
Universidad de Alicante



MASTER in COLOR TECHNOLOGY
for the **AUTOMOTIVE SECTOR**

UNIVERSITY OF ALICANTE

Color Technology:
study of theories and techniques
used to design, manufacture
and measure colored objects

Academic year 2013-14

UA | UNIVERSIDAD DE ALICANTE
Departamento de Óptica, Farmacología
y Anatomía

Master's Degree in Color Technology for the Automotive Sector

A PROFESSIONAL PROFILE WITH A FUTURE

Color Technology focuses on the study of theories and techniques related to the design, manufacture and measurement of colored materials. A wide range of different industrial sectors are involved in color technology (colorants, coatings, textiles, ceramics, plastics, printing, multimedia, etc.). Unfortunately, in many cases, color experts within these sectors have not received any specific training in colorimetry. Therefore, their knowledge about colors, which is critical to developing their work, has been obtained through practical, possibly self-taught, experience.

For this reason, companies involved in these productive sectors often invest considerable resources in specific color training to improve their employees' skills. In the same way, the limited number of graduates who do have advanced color training are highly sought after by many companies.

Over recent decades, color measurement and color quality control of gonio-apparent materials have become key areas for the automotive industry and also for other sectors such as cosmetics, coatings, plastics, printing, textiles, architecture, etc. Therefore, it is necessary to count on in-depth knowledge of complex instrumentation techniques and visual evaluation procedures as regards differences in color and texture (sparkle and graininess); and even color formulation with solid and special effect pigments.

In response to this socioeconomic demand, the Vision and Color Group of the Department of Optics, Pharmacology and Anatomy at the University of Alicante, in collaboration with other academic institutions (UGR, UPC, UPV and CSIC) and different companies (AUDI, SEAT, BASF Coatings, BYK-Gardner, OPEL, PPG, etc), is offering the Master's Degree in Color Technology for the Automotive Sector postgraduate course with 60 ECTS credits.

A DEFINED OBJECTIVE

The purpose of this course is to provide comprehensive training in the multidisciplinary study of Color Science and Technology from a global perspective. Students will examine the physicochemical and visual laws and solve real or simulated problems that often arise when using special effect pigments in different industrial sectors, particularly within the automotive sector.

This course includes an industry-based internship of up to 300 hours and provides a great opportunity to achieve basic and advanced color control skills at an industrial level, particularly in the automotive sector.

For color experts with a university degree, this new postgraduate course is a great opportunity to enhance training and professional qualifications. Meanwhile, recent graduates who choose to undertake this specialist postgraduate course will find it easier to obtain highly specialized jobs, which are therefore more highly valued (and better paid).

SYLLABUS

- CIE Colorimetry (10 ECTS)
- Visual appearance (10 ECTS)
- Visual harmony management (10 ECTS)
- Coatings and plastics (3 ECTS)
- Formulation of pigments (7 ECTS)
- RTD introduction (industrial internship and Master's thesis) (20 ECTS)

TEACHING STRATEGY

Blended learning methodology (b-learning)

EVALUATION METHOD

Classroom attendance is highly recommended, with a mandatory attendance for laboratory practicals. The virtual learning activities will be diverse and demanding. These activities will be evaluated to guarantee the assimilation of general, transversal, cognitive and procedural skills. If students do not fulfill the established requirements, they will simply receive a certificate of attendance.

The Master's thesis will involve drawing up, presenting and defending a report on the activities undertaken during the industrial internship (car manufacturers, coatings and plastic suppliers, etc.) or at a research institution.

ENTRY REQUIREMENTS

Spanish or foreign degree in chemistry, physics, material engineering, industrial engineering, computer engineering, multimedia, architecture or psychology, etc. B1 in English.

COURSE INFORMATION

Number of hours: 1500 (60 ECTS)

Type and duration:

10-20 students per study group. (Group 1: blended learning; Group 2: virtual learning with mandatory laboratory practices)

Semester 1 (Blended learning from September to February, Monday to Thursday)

Semester 2 (Industrial internship from March to May; Master's Thesis in June)

Timetable: 3 p.m. to 8 p.m. from Monday to Thursday

Registration fee: 4500 € to be paid by installments (corporate registration available)

Qualification awarded: Master's Degree in Color Technology for the Automotive Sector, signed by the University of Alicante President

GENERAL INFORMATION AND REGISTRATION

Secretary: Business School of the General Foundation of the University of Alicante

Department of Optics, Pharmacology and Anatomy

Apartado de correos nº. 99, 03080 – Alicante (Spain)

Tel: +34 965 90 93 73, Fax: +34 965 90 93 69

E-mail: escuela.negocios@ua.es , dofa@ua.es

For any general information regarding registration, legalization of documents, foreign students, scholarships, insurance and issuance of degree certificates please contact in the Center for Postgraduate and Doctorate Studies at the University of Alicante (CEDIP: <http://cedip.ua.es/>).

