

PROPIUESTA ABREVIADA DE MÁSTER ERASMUS MUNDUS

TÍTULO DE LA PROPIUESTA DE MÁSTER	Máster Erasmus Mundus "Color in Informatics and Media Technology" CIMET (solicitud de renovación)
DPTO/INST/CENTRO(S) PROPONENTE(S) DE LA UGR	Departamento de Óptica
UNIVERSIDAD COORDINADORA	Université Jean Monnet (St. Etienne, France)
UNIVERSIDADES SOCIALES	University of Eastern Finland (Finlandia) UEF Gjovik College University (Noruega) GUC Universidad de Granada (España) UGR Université Jean Monnet (France) UJM coordinadora
CENTROS ASOCIADOS (en su caso)	- Toyohashi University of Technology (Japón) TUT - Institut Teknologi Bandung (Indonesia) ITB - Chromasens GmbH (Alemania)
CENTROS, EMPRESAS, INSTITUCIONES QUE AVALAN LA PROPIUESTA	Technicolor (Francia) Bioprosesa (España) Indra (España) Multiscan (España) Infaimon (España) Y otras empresas de Francia, Noruega y Finlandia
RAMA DE CONOCIMIENTO	Óptica
ORIENTACIÓN DEL MÁSTER	<input type="checkbox"/> Profesional <input checked="" type="checkbox"/> Investigación <input checked="" type="checkbox"/> Académica

ANTECEDENTES Y JUSTIFICACIÓN DE LA PROPUESTA (*use las líneas que estime necesarias*):

La presente solicitud pretende obtener la renovación de la Etiqueta Erasmus Mundus por parte de la Comisión Europea. En 2007 el máster Erasmus Mundus CIMET obtuvo dicha etiqueta y ha venido impartiéndose desde Septiembre de 2008 en las cuatro universidades participantes University of Eastern Finland (Finlandia), Gjovik College (Noruega), Universidad de Granada (España) y la universidad coordinadora: Université Jean Monnet (Francia).

La presente solicitud de renovación del máster CIMET incluye algunas pequeñas modificaciones sobre el máster que viene impartiéndose desde Septiembre 2008, modificaciones no sustanciales sobre su estructura general: modificación de algunas asignaturas, propuesta de un semestre cero, inclusión de "socios asociados", apoyo expreso de empresas del sector, modificación de los órganos de coordinación del máster, ...

Actualmente el máster Erasmus Mundus CIMET atrae más de 200 solicitudes de admisión anuales procedentes de más de 60 nacionalidades distintas. La calidad de la formación que reciben durante los dos años de duración del máster unida a la excelencia de los estudiantes que lo cursan ha permitido conseguir pleno empleo para los más de 40 estudiantes que han conseguido completarlo en las dos primeras ediciones del máster. Una gran mayoría de esos 40 estudiantes están realizando tesis doctorales en prestigiosas universidades de Europa y Estados Unidos, y el resto han sido contratados por empresas del sector.

MÁSTERES DE LA UGR RELACIONADOS Y POSIBLE CONCURRENCIA (*Indíquese también la posible concurrencia con enseñanzas de Grado*)

Actualmente el máster Erasmus Mundus CIMET, dentro de la UGR, ofrece una formación académica que no se solapa con ningún máster oficial de los que oferta nuestra universidad. No en vano es el único máster en Europa dedicado a los tópicos interdisciplinares en donde la ciencia y tecnología del color juegan un papel esencial. Solo existen dos másteres en el mundo que tengan ciertos elementos en común con el máster CIMET. Uno se imparte en el Rochester Institute of Technology (EEUU) (<http://www.cis.rit.edu/index.php>) y el otro se ha venido impartiendo hasta el curso pasado en Leeds (UK) (<http://ww.colour.leeds.ac.uk>) y es un máster de un año y centrado en aspectos más prácticos que académicos y de investigación.

En cuanto a la concurrencia con enseñanzas de Grado, durante los cuatro años de impartición hemos comprobado que los estudiantes que han cursado el máster fundamentalmente proceden de las siguientes titulaciones: Física, Telecomunicaciones, Ingeniería Informática, Ingeniería Electrónica y Matemáticas. Este es el perfil mayoritario del estudiante que ingresa en el máster. Desde cualquier carrera afín a Físicas, Telecomunicaciones, Informática, Óptica, Matemáticas, ... se permite el acceso al máster CIMET.

COMPETENCIAS (*use las líneas que estime necesarias*):

The main aims of the Master course are: - to give students interdisciplinary competences in optics, photonics, colour sciences, digital imaging and media technology science; - to associate the comprehension of computer science, digital

processing and physical phenomena; - to acquire the relevance of the complementarities between color science, digital processing of images and media technologies.

This Master programme provides an unrivalled multi-disciplinary knowledge in photonics and color science, digital imaging and computer science, and media technologies science applied to industrial problems and research problems. Students are trained to become top specialists in these fields. The design of the programme takes full advantage of the environment offered within the consortium. Thus, students achieve knowledge in computer and media and numerical imaging sciences which allow them to adapt quickly to the changes of this constantly evolving field. Students acquire also mobility and broadmindedness. The language skills which constitute, in an age of globalization, a major asset for finding research work in public laboratories and private companies. In addition, students are brought in contact with European culture and languages and get the chance to live in different European cities (Saint Etienne, Granada, Joensuu, Gjøvik) with a long and still visible history.

ACCESO Y ADMISIÓN DE ESTUDIANTES (*use las líneas que estime necesarias*):

The selection procedure is transparent and it is a shared responsibility of the Academic Coordinators to rate the applications. Each application file is rated by all four Academic coordinators - following common criteria - providing that it is complete and received in due time.

Application procedure

Students applications must be performed online via the CIMET Application Server. The server is open early autumn each year. All the information sent by students will be accessible to the administrative coordinator as well as the academic coordinators of each university. Selected candidates will be required to send the full paper application by post or express mail for verification.

The following documents are required:

1. A Curriculum Vitae.
2. A personal motivation statement.
3. Copies of transcripts that give proof on the undergraduate and first graduate studies.
4. Two letters of recommendation.
5. A certificate of language proficiency in English
6. Research project and publications, if they are mentioned in the Curriculum Vitae.

The following aspects of the applications are checkout by the four academic coordinators:

1. Academic record

Excellence of the candidate: outstanding achievement in the applicant's BSc degree level (i.e. 180 ECTS in the European system) or equivalent, in physics, optics, imaging science, computer science, mathematics or any discipline pertaining to the quantitative description of color, provided that the applicant can produce evidence of the necessary previous knowledge (i.e. a base of minimal competencies) particularly in the fields of physical/technical fundamentals, computer science fundamentals, and image analysis and signal processing fundamentals.

The applicants of third countries have to be graduated with a graduate diploma equivalent of a graduate level of 180 ECTS in the European system. The applicants must have at least a C average on ECTS grading scale, or equivalent, during their undergraduate studies.

2. Language

Language ability: teaching and examination being given in English, the candidate must demonstrate sound knowledge of the language (the requirement for competence in English is equivalent to TOEFL with at least 213 points (computer based)/ 550 points (paper based)/ 82 points Internet based or IELTS at grade 6.5, or a Cambridge Proficiency Certificate of English at least grade C).

3. Motivation letter

4. Gender equality

Beyond these three main criteria, and provided that the qualification and the quality of candidates is identical, the consortium will have a particular attention to the principle of gender equality in cooperating with the national and European organizations in charge of helping and counseling the higher education institutions toward gender equality in the student, academic and research communities.

RESUMEN DEL PLAN DE ESTUDIOS

ESTRUCTURA DEL PLAN DE ESTUDIOS Y CRONOGRAMA (*en la estructura del plan de estudios incluya una tabla en la que se indique de forma gráfica y clara el número de créditos de la propuesta de Máster, y su distribución en asignaturas -indicando su carácter de obligatorias u optativas- y en Trabajo Fin de Máster*):

The general structure. The CIMET Master Course is a two-year full time programme of 120 ECTS. Starting from a comprehensive coverage of the prerequisites in the field of fundamentals in photonics and optics, color science, digital imaging, data analysis and statistics, and computer science, the students will cover at specialized level a first specialization either in *color science, imaging and processing* (at UGR) or in *color in imaging and computer vision* (at UJM) and a second specialization either in *spectral technology* (at UEF) or in *color in media technology* (at GUC). Each student admitted into CIMET is offered different curricula depending to his/her background and to the set of courses chosen in the first specialization and to the second specialization chosen

The first semester is devoted to the foundation courses in: *photonics and optics fundamentals, color science, image analysis and processing, data analysis and statistics, algorithms design and analysis*. The first semester (S1) is done either at UJM or UGR. These fundamental courses are necessary to students before beginning the two specializations they will follow. The second semester (S2) is devoted to compulsory courses in: *advanced colorimetry, human vision and perception, pattern recognition*, and optional courses necessary to students before beginning the second specialization. At each curriculum corresponds two specializations. The first specialization is done in the second semester (either at UJM or UGR) and the second one in the third semester (S3) (either at UEF or GUC). Thus, students can study during the master program either in two or three universities. Next, students can do their Master thesis either in one of the universities visited in S1, S2 or S3 or in third or a fourth university. During semesters 1, 2 and 3, students have to follow two language courses or cultural courses (5 ECTS per course), except students who already master the language of one of the EU consortium partner in this case he/she will have to select an optional course among those proposed.

Study programme. The programme is made up from:

- **A Fundamental taught module:** 5 compulsory courses + 1 optional course(s) (5 ECTS by course). The study programme of fundamental courses has been organized to be identical at UJM and UGR. Students will have to follow the language course proposed by the host university or to follow an optional course on *Business Entrepreneurship*.
- **A first specialization taught modules:** 3 compulsory courses + 3 optional course(s) (5 ECTS by course). Students will be free to choose their first specialization; either those proposed by UGR or those proposed by UJM. Students will have to choose 3 courses among the 6 optional courses proposed. The study programme of compulsory courses is identical at UJM and UGR. The optional courses proposed by UJM or UGR vary in function of the domains in which they are experts.
- **A second specialization taught modules:** 4 compulsory courses + 2 optional course(s) (5 ECTS by course). Students will be free to choose their second specialization; either those proposed by UEF or those proposed by GUC. The study programme of compulsory courses and optional courses varies in function of the specialization. There will be only one common course (the *Industrial project*)

between UEF and GUC. Students will have also to choose 2 courses among the 3 optional courses proposed. Students will have to follow the language course proposed by the host university, except students who already master this language, in this case he/she will have to select another optional course among those proposed (see section A 4.4).

- **1 Master dissertation (30 ECTS).** During the training period (Master Thesis), students will have the chance to investigate theories and phenomena in a laboratory at the forefront of current knowledge and expertise. A huge list of topics of Master thesis will be proposed by each partner for each specialization domain. In 2011 (resp. 2010), the CIMET 1 consortium proposed 80 (resp. 56) topics of Master Thesis, among them 19% (resp. 25%) were proposed by a company and 15% (resp. 20%) by an academic partner. In CIMET II students will have a greater choice of destinations for their Master Thesis, they could go either at ITB or at TUT (now associated partners). They could also follow (during the semester 4) complementary courses at ITB or at TUT to further develop their curriculum.

Semester 1	Title of Course	ECTS
Taught at: Univ. Granada (UGR) and Univ. Jean Monnet (UJM) 30 ECTS	Fundamentals of Photonics and Optics (compulsory)	5
	Design and Analysis of Algorithms 1 (compulsory)	5
	Color Science (compulsory)	5
	Image processing and analysis (compulsory)	5
	Data analysis and Statistics (compulsory)	5
	<i>Optional course: Spanish or Spanish culture or French or French culture</i>	5

Semester 2	Title of Course	ECTS
Taught at: Univ. Granada (UGR) and Univ. Jean Monnet (UJM) 30 ECTS	Advanced Colorimetry (compulsory)	5
	Pattern Recognition 1 (compulsory)	5
	Human Vision and Perception (compulsory)	5
	Optional course (UGR) : Advanced Color image processing	5
	Optional course (UGR) : Spectral Imaging	5
	Optional course (UGR): Design of Algorithms 2	5
	Optional course (UGR): Fourier Optics	5
	Optional course (UGR and UJM) : Radiometry, Sources and Detectors	5
	Optional course (UJM) : Compression and transmission in media systems	5
	Optional course (UJM): Advanced 3D- 4D Computer Vision	5
	Optional course (UJM): Lighting and image capture	5
	Optional course (UJM): Computer Vision	5

Semester 3	Title of Course	ECTS
Taught at: Gjovik University College (GUC) 30 ECTS	Advanced course in video processing (compulsory)	5
	Industrial Project (compulsory)	5
	Advanced Course in Color Image Reproduction (compulsory)	5
	Optional course: Advanced Course in Game Technology	5
	Optional course: Selected topics in color imaging	5
	Optional course: Content-based image Indexing and Retrieval	5
	Optional course: Pattern Recognition 2	5
	Norwegian language and culture (compulsory)	5

Semester 3	Title of Course	ECTS
Taught at: University of Eastern Finland (UEF) 30 ECTS	Computational Color (compulsory)	5
	Spectral Imaging Devices (compulsory)	5
	Industrial Project (compulsory)	5
	Optional course: Stochastics Processes	5
	Optional course: Machine Vision	5
	Optional course: Display Technologies	5
	Finnish or Finnish culture (compulsory)	5

Semester 4		ECTS
At any of the four partners (UGR, UEF, GUC or UJM) or at any of the three associated partners	<i>Master Thesis</i> <i>(including Scientific Methodology)</i>	30

Rellenar una ficha por cada módulo de la propuesta de máster:

MÓDULO (denominación):	Fundamental taught module (impartido en la UGR y en la UJM)	
CRÉDITOS ECTS: 30	CARÁCTER: Obligatorio	
Materia/asignatura 1 (denominación)	Photonics and Optics Fundamentals	
ECTS	5	
Breve contenido (máx. 200 palabras)	This course develops an understanding of the fundamentals of Optics and Photonics focused on light models (geometrical, electromagnetic, quantum), propagation of light (rays), classical interaction of light with matter (reflection, refraction, absorption, scattering, chromatic dispersion), classical interaction of light with light (interferences, diffraction), paraxial theory of imaging systems and quality of imaging systems (aberrations, resolving power).	
Profesorado	Javier Romero Mora (UGR) y Youcef Ouerdane (UJM)	
Materia/asignatura 2 (denominación)	Design and Analysis of Algorithms 1	
ECTS	5	

Breve contenido (máx. 200 palabras)	Specification of the concept of an algorithm and analysis of its computational complexity, design principles of algorithms and their application to computing problems. Topics include complexity analysis techniques, the main design principles such as divide-and-conquer, dynamic programming, greedy methods and an introduction to the NP-completeness theory. Heap data structure and advanced binary search trees are also studied. Approximation, randomized and optimization techniques are considered for finding suboptimal solutions to NP-complete problems.
Profesorado	Juan Manuel Fernández Luna (UGR) y Amaury Habrard (UJM)
Materia/asignatura 3 (denominación)	Color Science
ECTS	5
Breve contenido (máx. 200 palabras)	To supply fundamentals and basic knowledge of basic Colorimetry and practical information on color measurements and computation of color specifications. Learning outcomes: <ul style="list-style-type: none">• Training on color attributes, color measurements and color specification systems.• Knowing the relationships between colorimetric values and color attributes and color vision mechanisms.• Practical measurement and calculation of different colorimetric values: color coordinates, whiteness index, color rendering index and degree of metamerism.
Profesorado	Eva Valero Benito y Luis Gómez Robledo (UGR) y Damien Muselet (UJM)
Materia/asignatura 4 (denominación)	Image processing and analysis
ECTS	5
Breve contenido (máx. 200 palabras)	This course is a graduate-level introductory course to the fundamentals of digital image processing and analysis. It emphasizes general principles of image processing, rather than specific applications. We expect to cover topics such as digital image definition, basic transformations, sampling and quantization, point operations, linear image filtering, transforms and histogram processing, spatial, frequency and nonlinear filtering, image segmentation, texture analysis, color representations and spaces, image restoration, simple feature extraction and recognition tasks.
Profesorado	José Antonio Díaz Navas y Rafael Huertas (UGR) y Hubert Konik (UJM)
Materia/asignatura 5 (denominación)	Data analysis and statistics
ECTS	5
Breve contenido (máx. 200 palabras)	This course develops understanding of use of statistical analysis for multidimensional data. It also give fundamentals to understand data analysis from raw measurement values to higher level decision making in color and image context. The course develops basic understanding for difference between analysis with or without <i>a priori</i> data as well as ways to evaluate results. The methods will be learned in practical sessions, where they will be programmed and tested with real data. The course is practice oriented, where students learn basics of data analysis useful in color, color image and spectral image analysis and processing. In lectures basics of methods are lectures and in practical session, their usage is practices. The aim is not to get deep theoretical understanding and derivation of methods.
Profesorado	Pedro A. García (UGR) y Fabrice Mulhbenbach (UJM)

MÓDULO (denominación):

Color science, imaging and processing (impartido en la UGR)

CRÉDITOS ECTS: 30

CARÁCTER: Obligatorio

Materia/asignatura 1 (denominación)	Advanced colorimetry
ECTS	5
Breve contenido (máx. 200 palabras)	To supply an introduction color difference models and color appearance models, their evolution and present development. Also, basic knowledge on color reproduction methods and perceptual and physical evaluation of color images. On completion of this course the students will be able to: <ul style="list-style-type: none"> · Describe the color difference models. · Describe the perceptual attributes of colour and the different systems for the representation of colour · Demonstrate the use of colour measurement instruments and the interpretation of colour measurement data · Demonstrate the computation of uniform colour space coordinates from reflectance measurements · Describe the requirements for consistent colour reproduction across different media. · Practical implementation of measurements of the appearance. · Skills on methods of evaluation of the quality of color images. · Basic methods of color reproduction on the industry.
Profesorado	Rafael Huertas Roa y Manuel Melgosa Latorre (UGR)
Materia/asignatura 2 (denominación)	Pattern Recognition 1
ECTS	5
Breve contenido (máx. 200 palabras)	This course presents an advanced study (with both practical and theoretical aspects) of some data analysis concept such as data mining and clustering. Both techniques are widely applied for image analysis. Introduction to data mining (item set mining, closed itemset, graph mining). Clustering algorithms (basics, sequential algorithms, hierarchical algorithms, soft clustering, density based clustering, self organizing maps, ...)
Profesorado	Francisco José Cortijo Bon (UGR)
Materia/asignatura 3 (denominación)	Human Vision and Perception
ECTS	5
Breve contenido (máx. 200 palabras)	The aim of the course is to provide a solid and integrated view of the visual processes with an emphasis on the physical aspects and on automatic processing of visual information. This more quantitative approach is complemented with notions of retinal and cortical organization and with the fundamentals on visual psychophysics. Although the course aims at a solid theoretical basis, practical issues and problem solving will be considered wherever appropriate and independent project development and research will be strongly encouraged.
Profesorado	Juan Luis Nieves (UGR) y Sergio Nascimento
Materia/asignatura 4 (denominación)	Advanced Color image processing
ECTS	5
Breve contenido (máx. 200 palabras)	This course is the natural continuation of the compulsory course "Image Processing and Analysis", in which new topics as color images and video processing will be tackled.
Profesorado	José Antonio Díaz Navas y Luis Gómez Robledo (UGR)
Materia/asignatura 5 (denominación)	Spectral imaging
ECTS	5

Breve contenido (máx. 200 palabras)	The main aim of this course is to provide the basis of the multispectral approach of color imaging, i.e., imaging systems that use more than three acquisition channels. The contents include image capture procedures, spectral characterization of image capture devices, estimation of spectral functions from conventional image capture systems, evaluation of the accuracy or performance of multispectral images, and a basic description of some of the most relevant applications of multispectral images.
Profesorado	Javier Hernández Andrés y Eva Valero Benito (UGR)
Materia/asignatura 6 (denominación)	Radiometry, Sources and Detectors
ECTS	5
Breve contenido (máx. 200 palabras)	This course develops an understanding of the measurement of electromagnetic radiation in spectral regions from ultraviolet to infrared. The course covers principles of radiometric, photometric and spectrophotometric instrumentation, including the study of light sources and physical detectors.
Profesorado	Antonio Pozo Molina y Ana Carrasco Sanz (UGR)
Materia/asignatura 7 (denominación)	Design of algorithms 2
ECTS	5
Breve contenido (máx. 200 palabras)	This course presents an advanced study (with both practical and theoretical aspects) of some supervised learning algorithms useful to tackle pattern recognition tasks in computer vision. It gives a strong theoretical background which will allow students to design their own algorithms. · Advanced statistical learning theory, · Convex Optimization, · Theory of Boosting, · Advanced Support Vector Machines, Kernel theory, · Metric learning.
Profesorado	José Manuel Benítez (UGR)
Materia/asignatura 8 (denominación)	Fouier Optics
ECTS	5
Breve contenido (máx. 200 palabras)	This course develops an understanding of the fundamentals of diffraction limited and aberrated limited imaging systems. The course covers advanced topics in diffraction, Fourier Optics and optical image processing. Different architectures for optical-based image manipulation will be given, including optical correlation, wavefront coding, recording and manipulation, spatial filtering techniques, optical pattern detection, recognition and extraction, and optical correlators used in inspection industry. This course provides also an opportunity to engage with practical and theoretical aspects of optical and digital holography.
Profesorado	Juan L. Nieves Gómez y Javier Hernández Andrés (UGR)

MÓDULO: TRABAJO FIN DE MÁSTER	CARÁCTER: OBLIGATORIO
CRÉDITOS ECTS: 30	
Línea de investigación 1 (denominación)	
Breve contenido (máx. 200 palabras)	Semester 4 is dedicated to the Master Thesis. From January on, students join a laboratory from one of the Consortium universities to undertake the Master Thesis project. For every cohort more than 80 topics are proposed to the students, some of them (around 20) in collaboration with some companies. The supervisors of the topics are from the teaching staff of the four universities that run the master CIMET.

- *Presupuesto estimado de gastos y, en su caso, posibles fuentes de financiación.*

A fecha de hoy, el siguiente presupuesto es susceptible de modificación pero la versión final podrá consultarse en la solicitud enviada a la Comisión Europea y cuya copia será enviada al Vicerrectorado de Relaciones Internacionales.

La firma de un Convenio Específico de Ayudas anual con la Agencia Ejecutiva (EACEA), que cubrirá la financiación de cada una de las 5 ediciones consecutivas, supondrá que el consorcio reciba anualmente para gastos de gestión una cantidad anual de 30.000€. El número de becas Erasmus Mundus para estudiantes y profesores lo decide cada año la EACEA, que va disminuyendo progresivamente el número de becas para fomentar la búsqueda de sostenibilidad por parte de los consorcios.

La búsqueda de financiación externa para cubrir un número mayor de becados constituye una estrategia prioritaria del CIMET, fundamentalmente en el ámbito de empresas del sector que ya están colaborando, aunque sea sin financiación, con el máster CIMET desde 2008. Esperamos que, cuando la situación económica lo permita, estas empresas puedan patrocinar becas de estudios para cursar el máster CIMET. Además confiamos en obtener financiación de organismos públicos (Ministerio de Educación, Escuela de Posgrado de la UGR, ...) que nos permita completar la financiación de la EACEA.

La institución coordinadora (Saint Etienne, France) durante la duración del programa se encargará del pago de gastos administrativos, personal, movilidad de estudiantes y profesores, visados, seguros médicos, distribución de correo, etc.

En el caso de que el máster CIMET tenga un número reducido de estudiantes que puedan pagarse la matrícula completa del máster (y un número pequeño de estudiantes con beca Erasmus Mundus), y con el fin de atraer a los mejores estudiantes del mundo, el consorcio podrá decidir becar, de los fondos propios del consorcio, hasta seis estudiantes en cada promoción disminuyéndoles el precio de la matrícula a la mitad.

La sostenibilidad del máster CIMET está fuertemente supeditada al atractivo que el máster supone para los nuevos estudiantes y del establecimiento de nuevas colaboraciones económicas e institucionales de las cuales se puedan obtener financiación suficiente para garantizar la continuación del máster.

La promoción internacional de la oferta académica del máster es otro elemento esencial para garantizar la sostenibilidad del máster. El consorcio viene apostando fuertemente por actividades que favorezcan esta promoción.

31-Enero-2012

Firma, sello y fecha

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NOTA: En todo caso, ha de adjuntarse la siguiente documentación:

- Información curricular abreviada del profesorado de la UGR que participe en la propuesta, según el modelo establecido por la Escuela de Posgrado.
- Información de la carga docente del profesorado de la UGR implicado en la propuesta, según el modelo establecido por la Escuela de Posgrado.
- Informe del Centro de la UGR en el que se desarrollará la docencia presencial, sobre la disponibilidad de espacios, equipamientos y servicios necesarios para la impartición del título.
- Presupuesto estimado de gastos y, en su caso, posibles fuentes de financiación.
- Cartas de aval (en su caso) de la propuesta (empresas, instituciones...).

PRESENTACIÓN DE LAS PROPUESTAS:

Por razones de plazo, las propuestas deberán presentarse, junto a la documentación complementaria requerida, NECESARIAMENTE, en el Registro de la Escuela de Posgrado, Sede de la Avda. de la Constitución, nº 18, Edif. Elvira, bajo, Granada