

PROGRAMA DE DOCTORADO UPM

Escuela Internacional
de Doctorado



AREAS TEMATICAS y PROGRAMAS



MANUFACTURING & INDUSTRY
Tecnologías Industriales

- Aerospace Engineering
- Automation and Robotics
- Economy and Innovation Management
- Engineering in Industrial Organization
- Environmental, Chemical and Material Engineering
- Electrical and Electronic Engineering
- European Doctorate in Industrial Management
- Fluid Mechanics
- Mechanical Engineering
- Production Engineering and Industrial Design
- Research, Modeling and Risk Analysis of the Environment
- Sustainable, Nuclear and Renewable Energy

ICT
Tecnologías de la Información y las Comunicaciones

- Artificial Intelligence
- Biomedical Engineering
- Communication Systems and Technologies
- Computation Science and Technology for Smart Cities
- Electronic Systems Engineering
- Mathematical Eng., Statistics and Operations Research
- Photovoltaic Solar Energy
- Systems and Services Engineering for the Information Society
- Software, Systems and Computing
- Telematic System Engineering

AGROFORESTRY & ENVIRONMENT
Tecn. Agroforestales y Medio Ambiente

- Advanced Forest Research
- Agricultural Engineering
- Biotech and Genetic Resources of Plants and Assoc. Microorganisms
- Complex Systems
- Engineering and Management of Environment
- Environmental Technology for Sustainable Agriculture
- Project Planning for Rural Development and Sustainable Mngt

ARCHITECTURE
Arquitectura

- Advanced Architectural Design
- Architecture and Urban Planning
- Architecture Heritage
- Building and Architecture Technology
- Building Structures
- Sustainability and Urban Regeneration

CIVIL ENGINEERING
Ingeniería Civil

- Civil Engineering Systems
- Structural, Geotechnical and Material Engineering
- Naval Architecture, Marine and Ocean Engineering
- Earth Informatics Engineering
- Technological Innovation in Building Construction

ARTS & SOCIAL SCI
Artes y CC Sociales

- Architecture Communication
- Architecture, Design, Fashion and Society
- **Physical Activity and Sport Sciences**
- Music and Sci&Tech for Music (under revision)



PROGRAMA DE DOCTORADO UPM



UNIVERSIDAD POLITÉCNICA DE MADRID DOCTORATE PROGRAMS

A WIDE AND ATTRACTIVE DOCTORATE OFFER!

HUMAN RESOURCES
21 R&D&I Centres and Institutes
Strong collaboration with industry and foreign universities
46 Doctorate programs

WHY UPM FOR DOCTORATE?

- MAIN TECHNOLOGICAL UNIVERSITY IN SPAIN
- SPECIALISED IN ENGINEERING, ARCHITECTURE, SPORTS AND FASHION
- SOURCE OF HIGH IMPACT KNOWLEDGE

№ 1 IN ATTRACTING R&D CONTRACTS WITH INDUSTRY
№ 1 IN UNIVERSITY PATENT APPLICATIONS
№ 1 IN NEW TECHNOLOGY VENTURES CREATION

RESEARCH & INNOVATION CENTRES STRONG COLLABORATION WITH INDUSTRY

R&D&I CENTRES

- Biomedical Technology Centre (CTB)
- Centre for Advanced Materials and Devices for ICT (CEMDATIC)
- Centre for Automation and Robotics (CAR, UPM-CSIC)
- Centre for Supercomputation & Simulation (CCS)
- Centre of Electronics for the Industry (CEI)
- Centre on Software Technologies and Multimedia Systems for Sustainability (CTISEM)
- Information Processing and Telecommunications Center (IPTC)
- Integral Domotics Center (CaDint)
- Laser Centre
- Research Centre for Biotechnology and Plant Genomics (CBGP)
- Research Centre for the Management of Agricultural and Environmental Risks (CEIGRAM)
- Structural Material Research Centre (CIME)
- Transport Research Centre (TRANSYT)

R&D&I INSTITUTES

- Institute for Automobile Research "Francisco Aparicio" (INSIA)
- Institute for Microgravity "Ignacio da Riva" (DDR)
- Institute for Nuclear Fusion (IFN)
- Institute for Optoelectronic Systems and Microtechnology (ISOM)
- Institute for Solar Energy (IES)

INNOVATION CENTRES

- Centre for Support for Technological Innovation (CAIT)
- Innovation and Technology for Development Centre (IrdUPM)
- AI, Innovation Space (UPM-Accenture Innovation Centre in Artificial Intelligence)

RESEARCH

- + 54 M€ in financed projects
 - 14.75 M€ Regional projects
 - 8.65 M€ National projects
 - 15.71 M€ International projects
 - 15.27 M€ Private projects and technical assistance to companies
- + 2,300 indexed publications

TECHNOLOGICAL INNOVATION

- 539 patents registered (from 1999)
- 40 patents currently in exploitation
- 71 University-Company Chairs
- + 200 spin-offs created and coached from 1998
- > 70% spin-off survival rate (3rd year)
- + 60M€ from investors (from 2007)

DOCTORATE AREAS AND THEIR PROGRAMS

MANUFACTURING & INDUSTRY	ICT	AGRICULTURE, FORESTRY AND ENVIRONMENT	CIVIL ENGINEERING	ARCHITECTURE	ARTS & SOCIAL SCI.
MANUFACTURING & INDUSTRY <ul style="list-style-type: none"> • Aerospace Engineering • Automation and Robotics • Economy and Innovation Management • Engineering in Industrial Organization • Environmental, Chemical and Material Engineering • Electrical and Electronic Engineering • European Doctorate in Industrial Management • Fluid Mechanics • Mechanical Engineering • Production Engineering and Industrial Design • Research, Modeling and Risk Analysis of the Environment • Sustainable, Nuclear and Renewable Energy 	ICT <ul style="list-style-type: none"> • Artificial Intelligence • Biomedical Engineering • Communication Systems and Technologies • Computation Science and Technology for Smart Cities • Electronic Systems Engineering • Mathematical Eng., Statistics and Operations Research • Photovoltaic Solar Energy Systems and Services Engineering for the Information Society • Software, Systems and Computing • Telematic System Engineering 	AGRICULTURE, FORESTRY AND ENVIRONMENT <ul style="list-style-type: none"> • Advanced Forest Research • Agricultural Engineering • Biotech and Genetic Resources of Plants and Assoc. Microorganisms • Complex Systems • Engineering and Management of Environment • Environmental Technology for Sustainable Agriculture • Project Planning for Rural Development and Sustainable Mngt 	CIVIL ENGINEERING <ul style="list-style-type: none"> • Civil Engineering Systems • Structural, Geotechnical and Material Engineering • Naval Architecture, Marine and Ocean Engineering • Technological Innovation in Building Construction • Earth Informatics Engineering 	ARCHITECTURE <ul style="list-style-type: none"> • Advanced Architectural Design • Architecture and Urban Planning • Architecture Heritage • Building and Architecture Technology • Edification Structures • Sustainability and Urban Regeneration 	ARTS & SOCIAL SCI. <ul style="list-style-type: none"> • Architecture Communication • Architecture, Design, Fashion and Society • Physical Activity and Sport Sciences • Music and its Sciences and Technologies

+ 2,800 FACULTY ACADEMICS
+ 670 RESEARCHERS CONTRACTED TO WORK IN R&D PROJECTS
+ 450 STUDENTS GRANTED BY PROJECTS
+ 1,200 ADMINISTRATION AND TECHNICAL STAFF
+ 2,000 PHD STUDENTS

UNIVERSIDAD POLITÉCNICA DE MADRID

EID ESCUELA INTERNACIONAL DE DOCTORADO - UPM

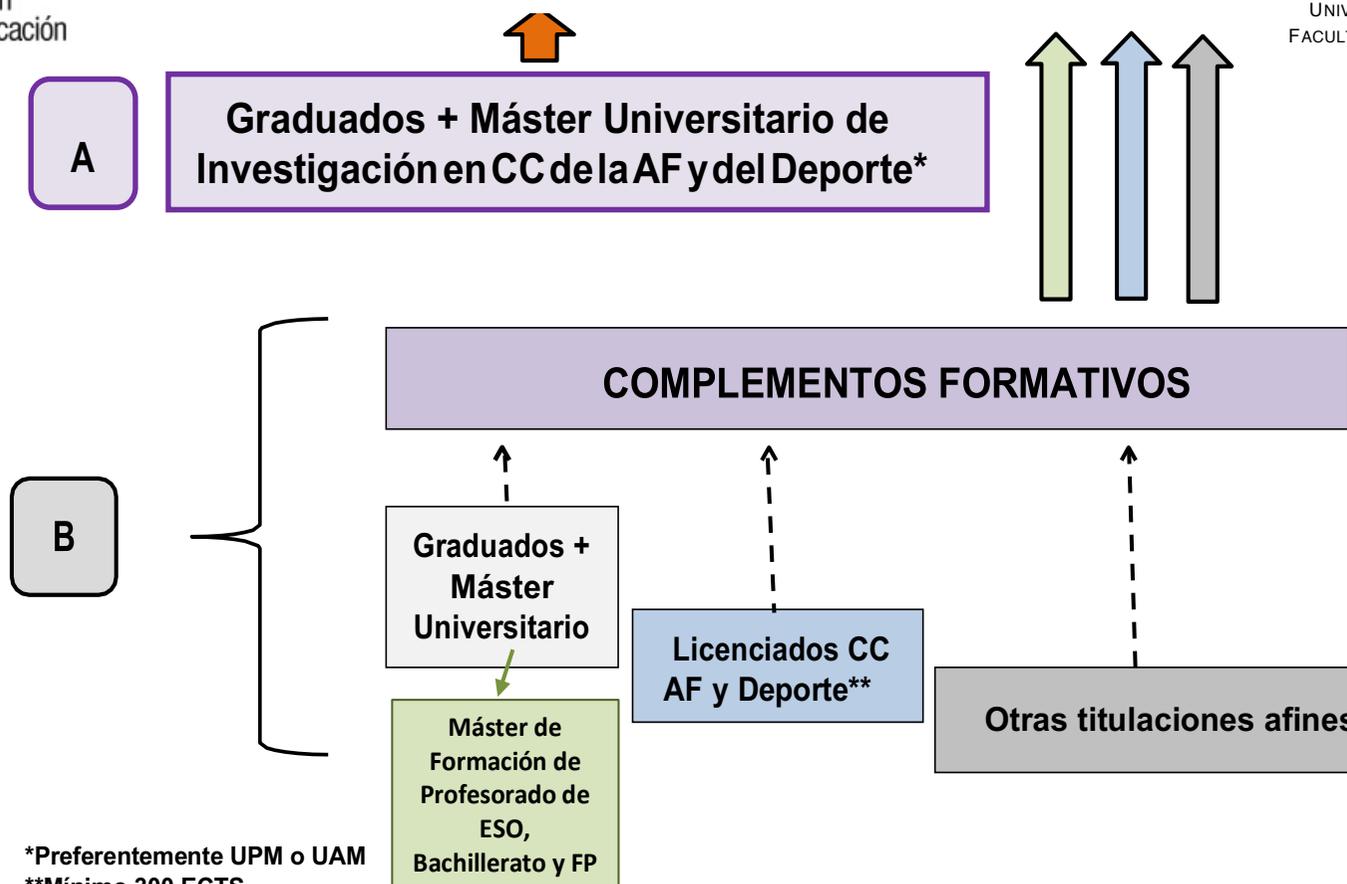
DOCTORATE PROGRAMS ACCESS

http://www.upm.es/Estudiantes/Estudios_Titulaciones/Estudios_Doctorado

VICERRECTORADO DE INVESTIGACIÓN, INNOVACIÓN Y DOCTORADO
ESCUELA INTERNACIONAL DE DOCTORADO
RECTORADO, EDIFICIO A, C/RAMIRO DE MAEZTU, 7. 28040, MADRID
INFORMATION: doctorado@upm.es

PROGRAMA DE DOCTORADO FACULTAD

Admisión al programa de Doctorado RD 99/2011 y RD 576/2023



*Preferentemente UPM o UAM

**Mínimo 300 ECTS

IMPORTANTE: Todos los solicitantes deberán contar con el compromiso para la dirección/tutorización de un profesor del Programa

PROGRAMA DE DOCTORADO



Acceso y admisión

La Comisión Académica del Programa de Doctorado (CAPD) establecerá, según el perfil del/de la solicitante, la realización de Complementos Formativos

Complementos Formativos



12 ECTS Asignaturas Obligatorias

12 ECTS Asignaturas Optativas

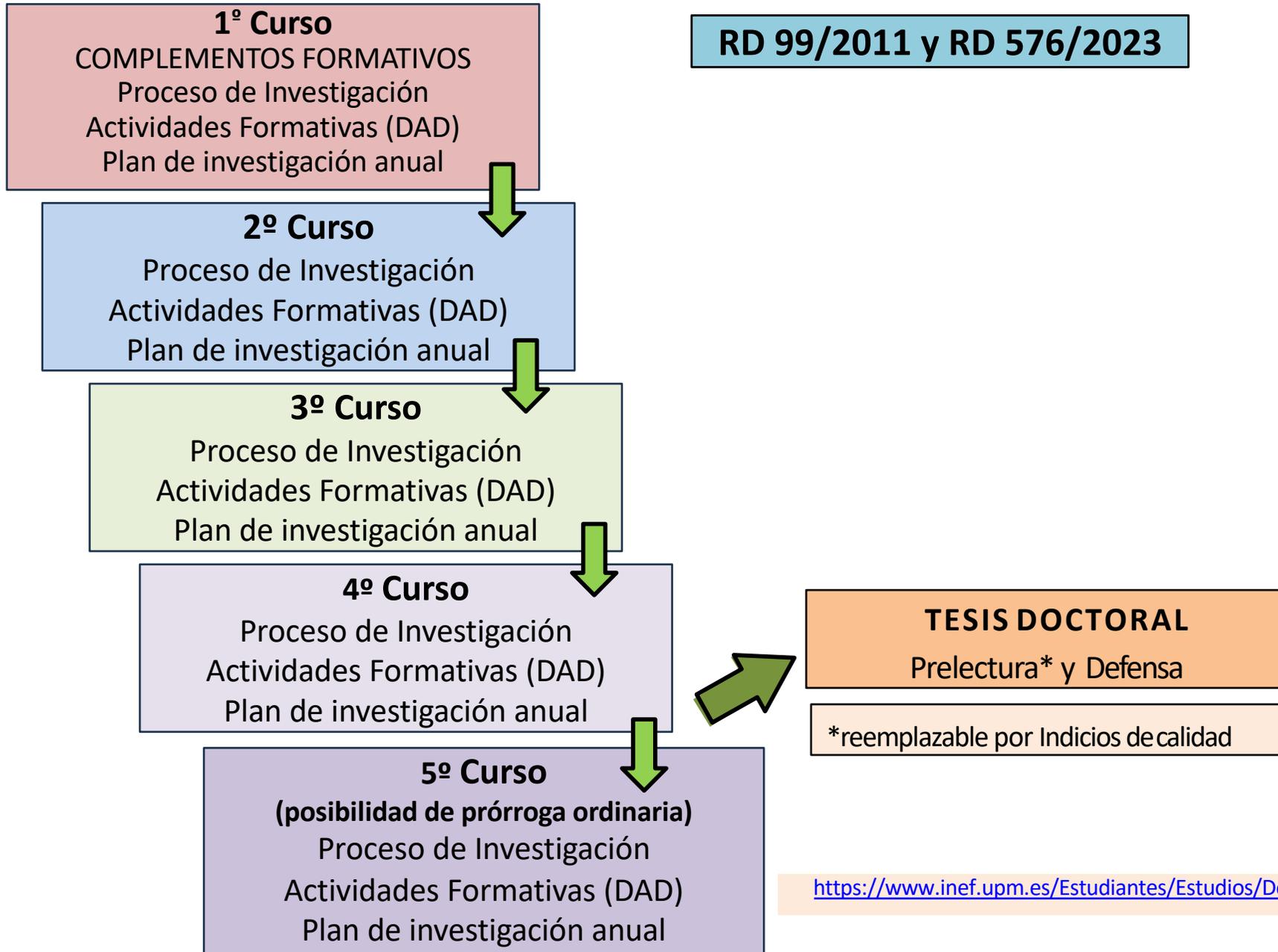
Asignaturas del Máster Oficial en Ciencias de la Actividad Física y del Deporte

<https://www.inef.upm.es/Estudiantes/Estudios/M%C3%A1ster%20Universitario%20en%20Ciencias%20de%20la%20Actividad%20F%C3%ADsica%20y%20del%20Deporte>

<https://www.inef.upm.es/Estudiantes/Estudios/Doctorado>

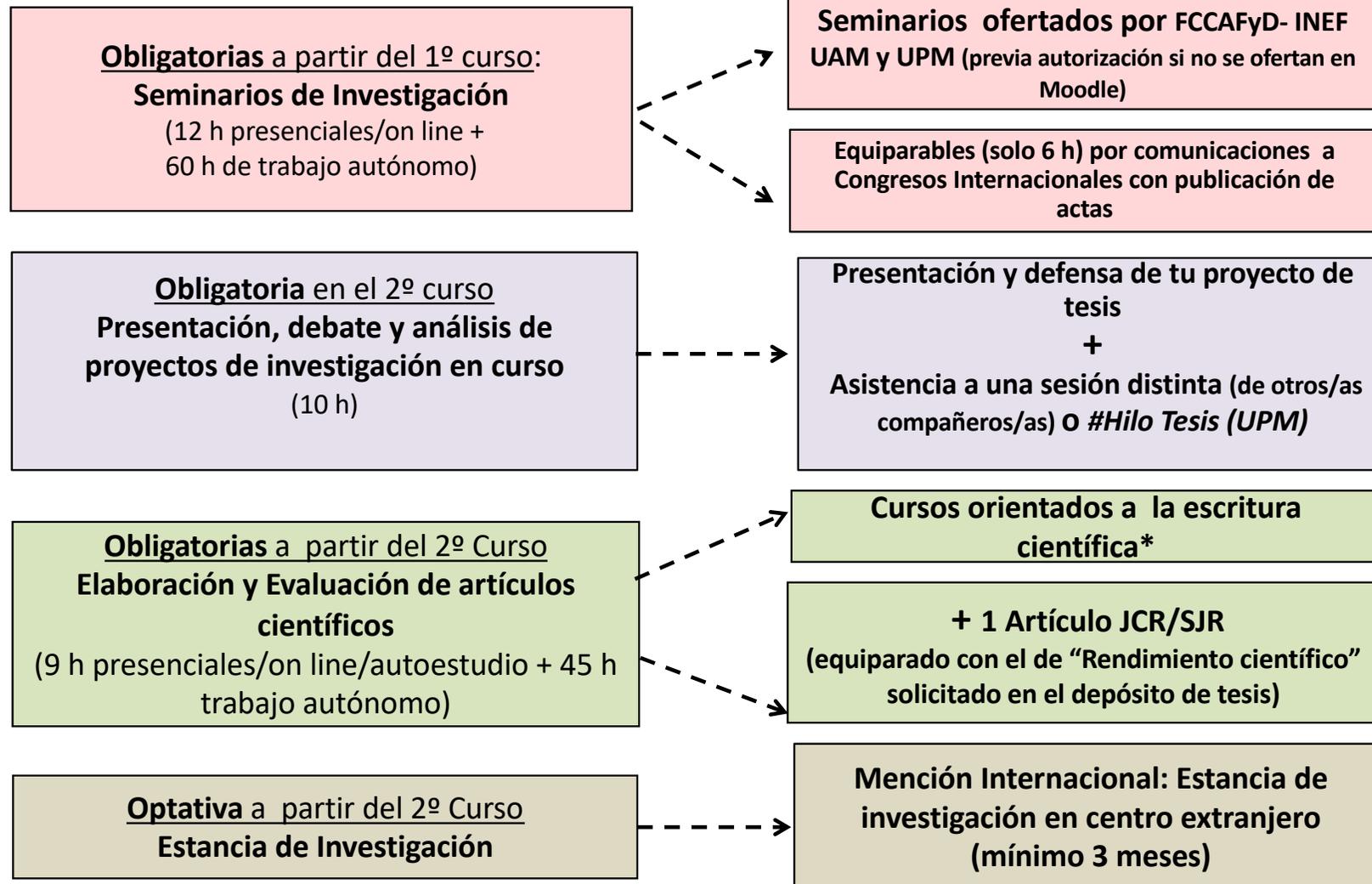
DESARROLLO DEL PROGRAMA

RD 99/2011 y RD 576/2023



ACTIVIDADES FORMATIVAS

Actividades Formativas 2023 – 2024 Programa de Doctorado RD 99/2011 y RD 576/2023



TESIS DOCTORAL

