



## Guía Docente

Datos Identificativos					2023/24
Asignatura (*)	Análise Estrutural de Edifícios Históricos	Código	630548017d		
Titulación					
Descritores					
Ciclo	Período	Curso	Tipo	Créditos	
Mestrado Oficial	2º cuatrimestre	Primeiro	Optativa	3	
Idioma	Castelán				
Modalidade docente	Non presencial				
Prerrequisitos					
Departamento	Construcións e Estruturas Arquitectónicas, Cívicas e Aeronáuticas Enxeñaría Civil				
Coordinación	Martín Gutiérrez, Emilio	Correo electrónico	emilio.martin@udc.es		
Profesorado	Martín Gutiérrez, Emilio	Correo electrónico	emilio.martin@udc.es		
Web	moodle.udc.es				
Descrición xeral	O enfoque da materia oríentase á aplicación práctica dos métodos numéricos en estudos de estabilidade e de comportamento estrutural vinculados a edificacións con valor histórico e obras de rehabilitación en xeral. Desenvólvense así competencias instrumentais útiles en labores periciais ou no momento de valorar comparativamente a incidencia de diferentes alternativas de intervención.				

## Competencias / Resultados do título

Código	Competencias / Resultados do título

## Resultados da aprendizaxe

Resultados de aprendizaxe	Competencias / Resultados do título		
Adquirir coñecementos xenéricos sobre técnicas instrumentais de auscultación e seguimento de construcións históricas.	AP5 AP8		
Profundar no estudo do comportamento mecánico da obra de fábrica e dos modelos que permiten abordar a súa caracterización analítica.	AP5 AP8		
Familiarizarse coa utilización de ferramentas que faciliten as tarefas de inspección e control técnico, e que poidan servir para analizar as repercusións a ter en conta ante unha determinada intervención.	AP5 AP8	BP1 BP2	CP4 CP6 CP12 CP13
Propor unha aproximación ás técnicas de diagnose estrutural de edificacións con valor histórico e obras de rehabilitación en xeral, utilizando aplicacións informáticas baseadas na programación de métodos numéricos.	AP5 AP8	BP1 BP2	CP4 CP6 CP12 CP13
Fomentar o desenvolvemento de capacidades actitudinais de carácter autónomo: tendencia á aprendizaxe continua, habilidade para resolver problemas de forma efectiva, capacidades de análise e síntese, organización e planificación persoal, xestión produtiva da documentación, e utilización de tecnoloxías da información e das comunicacións.		BP4	CP1 CP5

## Contidos

Temas	Subtemas
Principios, técnicas e ferramentas para a toma de datos.	
Complementariedade de técnicas instrumentais e analíticas.	
Comportamento mecánico da obra de fábrica.	
Técnicas de simulación numérica.	

## Planificación

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Metodoloxías / probas	Competencias / Resultados	Horas lectivas (presenciais e virtuais)	Horas traballo autónomo	Horas totais
Sesión maxistral	A5 B1 B2	12	12	24
Obradoiro	A5 B1 B2 C4 C6 C12 C13	9	13.5	22.5
Solución de problemas	A5 B1 B2 C4 C6 C12 C13	0	5	5
Traballos tutelados	A5 A8 B1 B2 B4 C1 C4 C5 C6 C12 C13	0	22.5	22.5
Atención personalizada		1	0	1

\*Os datos que aparecen na táboa de planificación son de carácter orientativo, considerando a heteroxeneidade do alumnado

Metodoloxías	
Metodoloxías	Descrición
Sesión maxistral	Consiste nunha metodoloxía expositiva que, en formato non presencial, canalízase mediante sesións síncronas, utilizando a plataforma de videoconferencias da Universidade, visionado de gravacións, e/ou estudo da documentación aloxada en Moodle.
Obradoiro	Propónse a exercitación mediante prácticas guiadas desenvolvidas con medios informáticos. Contempla a adquisición dunha metodoloxía operativa sobre a base de supostos prácticos cun nivel crecente de complexidade.
Solución de problemas	Propónse probas de carácter práctico, nas que se ha de afrontar situacións problemáticas concretas, deseñadas a partir dos contidos traballados previamente.
Traballos tutelados	A metodoloxía docente oríéntase basicamente segundo o criterio da aprendizaxe na acción, a efectos de potenciar a adquisición de destrezas específicas. Neste contexto cobra protagonismo a elaboración dun traballo amplo, onde conflúen as competencias profesionalizantes da materia, ligadas por tanto á utilización de aplicacións de análise numérica, con outras de carácter transversal, como son, entre outras, a procura de documentación (a miúdo facendo uso de novas tecnoloxías), a organización e planificación de actividades, a xestión da información, ou a expresión oral e escrita. De forma esquemática, distínguense os seguintes pasos: selección do tema, elaboración dun guión de traballo xenérico, exame in situ, reportaxe fotográfica, levantamento planimétrico, localización e consulta de fontes de referencia, construción e axuste de modelos, interpretación de resultados, e redacción dunha memoria final que atenda á totalidade do traballo. Dado o carácter tutelado do mesmo, deben producirse sesións periódicas de seguimento co profesorado, a fin de optimizar ou, no seu caso, reconducir as actividades en curso.

Atención personalizada	
Metodoloxías	Descrición
Traballos tutelados	Dada a especificidade dos contidos ligados á materia, e o diferente nivel de formación informática con que o alumnado pode acceder á mesma, enténdese crucial articular mecanismos de atención personalizada que atendan ás posibles singularidades. A tales efectos, recórrase ao desenvolvemento de tutorías presenciais e consultas a través dos recursos da plataforma virtual.

Avaliación			
Metodoloxías	Competencias / Resultados	Descrición	Cualificación



Traballos tutelados	A5 A8 B1 B2 B4 C1 C4 C5 C6 C12 C13	O seu desenvolvemento enténdese plenamente individual e de natureza non presencial. Para garantir a autoría do traballo, e a adecuada adquisición de competencias, na súa avaliación enténdense relevantes as sucesivas sesións de control, e por tanto o grao de cumprimento con relación ás indicacións formuladas en cada caso polo profesorado. Outros aspectos a valorar son: a profundidade e rigor do desenvolvemento; a procura de fontes de información; as relacións construídas entre os diferentes apartados; as capacidades de análise e síntese; a corrección do estudo metodolóxico, da diagnose construtiva e estrutural, das modelizacións e das oportunas conclusións; a argumentación; e a calidade gramatical, gráfica e técnica da documentación final.	100
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### Observacións avaliación

Como nas restantes materias que integran o presente posgrao, esíxese ademais unha asistencia non inferior ao 80% relativa á totalidade das sesións presenciais programadas. Este requisito non terá efecto cos estudantes que teñan recoñecida unha dedicación a tempo parcial segundo a Norma que regula o réxime de dedicación ao estudo e a permanencia e a progresión de estudantes de grao e máster na UDC. Cualquie constatación de plaxio ou incumprimento relevante das condicións establecidas para o desenvolvemento de entregas e/ou exámenes, derivará nunha calificación de suspenso (0) na materia e na convocatoria correspondentes, invalidando calquera valoración obtida en todas as actividades de avaliación previas de cara a outras convocatorias.

### Fontes de información

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## Recomendacións

Materias que se recomenda ter cursado previamente

Materias que se recomenda cursar simultaneamente

Materias que continúan o temario

## Observacións

Requírense unhas determinadas destrezas na utilización de ferramentas de deseño asistido por computador, así como uns coñecementos elementais sobre as bases teóricas do método de elementos finitos.

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