UCL Scholars Program
Mechanical Engineering/Caltech
Mechanical Engineering Admitting Dept./UCL

Total UCL Credits: 2
Total CIT Units: 45

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1. ARCL1014A Introduction to Archaeology

Level 1
Faculty of Social & Historical Sciences
Department of Archaeology
Not in Admitting Department – Fall Term
0.5 UCL credits
9 CIT units
Writing Intensive credit – Cathy Jurca
Was this course on your original list? No
Is it a primary or alternate course choice? Primary
Module Description:
This first-year Core Course runs in Term 1. It will provide an introductory overview of the emergence of archaeology as a discipline, beginning with a history of human curiosity about the past, moving through the age of antiquarian enquiry and closing with a consideration of the development of modern archaeology.

The course will place the development of archaeology in context with wider intellectual traditions and cultural movements in order to understand how and why the study of the human past came about. The methods and techniques of archaeology will be presented alongside the changing nature of interpretation of archaeological remains. The course concludes with a focus upon the importance and relevance of archaeological remains and their understanding in the contemporary world.

2. HART1701 London Architecture I

Course for non-HART majors
Faculty of Social & Historical Sciences
Department of History of Art
Not in Admitting Department – Fall Term
0.5 UCL credits
9 CIT units
Advanced Humanities credit – Cathy Jurca

Was this course on your original list? No
Is it a primary or alternate course choice? Primary
Module Description:
This module studies some of London's most iconic twentieth-century architecture. Starting out in the architecture gallery of the Victoria and Albert Museum, the course is organized around weekly visits to selected buildings, galleries and museum collections. Following a chronological journey through London since the First World War, we will trace the roots, development and heated debates of the modern architecture movement in London.The theme of twentieth-century 'modernisms' will be explored through diverse building projects such as Hampstead's luxury Lawn Road Flats, the avant-garde art and architecture of the 1930s London Underground, Battersea Power Station, post-war planning strategies, the Southbank Complex, and Denys Lasdun's seminal design for the Royal College of Physician's in the vicinity of Regent's Park. The course will conclude with a walking tour of King's Cross Station, including its surrounding area, as a way of investigating how architecture in London moved into the 'post-modern' era.

3. HIST6312A Colonial and Revolutionary North America, 1607-1787

Level 1
Faculty of Social and Historical Sciences
Department of History
Not in Admitting Department – Fall Term
0.5 UCL credits
9 CIT units
Writing Intensive Credit – Cathy Jurca
Was this course on your original list? No
Is it a primary or alternate course choice? Primary
Module Description:
This course aims to provide you with an understanding of the history of colonial and revolutionary North America from the first English settlement in Virginia to the aftermath of the War of Independence that created the United States. Attention is concentrated on the mainland English (later British) colonies, though we also consider French, Dutch, and Spanish North America and the relationship between English/British North America and the rest of the Atlantic world.

4. MECH303P Advanced Thermodynamics and Fluid Mechanics

Level 3
Faculty of Engineering
Department of Mechanical Engineering
Admitting Department – Fall term
0.25 UCL credits
9 CIT units
Option credit – Guillaume Blanquart

Was this course on your original list? No
Is it a primary or alternate course choice? Primary
Module Description:
The purpose of this course is to combine what you have been taught in years 1 and 2 on fluid mechanics and thermodynamics an apply them to real and practical problems. The fluid mechanical element to this course is built wholly around the fascinating and important area of compressible flows. This is a problem which is highly nonlinear but still tractable analytically and using graphical solutions because the flow adjustment is either through shocks or isentropic adjustments.

Fluids:
1. Normal/Oblique Shocks
2. Expansion fans
3. One-dimensional flow in pipes (Fanno/Rayleigh flows)
4. Forces on aerofoils

5. MECH304P Elasticity and Plasticity
Level 3
Faculty of Engineering
Department of Mechanical Engineering
Admitting Department – Fall term
0.25 UCL credits
9 CIT units
Option credit – Guillaume Blanquart
Was this course on your original list? No
Is it a primary or alternate course choice? Primary
Module Description:
Students will be introduced to fundamental aspects of the theory of elasticity and how the results can be related to engineering applications. This includes classical problems relating to plane stress and strain, end loading problems relating to both torsion and shear, and finally thin plates and shells. Although the emphasis is on theory, real-world applications are used as motivating and practice examples. Where practical, these examples will be linked to current or recent research within the department.