Double Master's Degrees programme between MSc. in Numerical Methods in Engineering (MMNE) at Barcelona School of Civil Engineering (UPC) and MSc Computational Mechanics at Swansea University.

Semester 1 (Q1)		Semester 2 (Q2)		Semester 3 (Q3)		Semester 4 (Q4)	
UPC Students at UPC	Swansea students at Swansea University	UPC Students at UPC	Swansea students at Swansea University	UPC Students at Swansea University	Swansea students at UPC	UPC Students at Swansea University	Swansea students at UPC
Compulsory Modules: Numerical Methods for Partial Differential Equations (5 ECTS) Finite Element Method (5 ECTS) Continuum Mechanics (5 ECTS) Advanced Fluid Mechanics (5 ECTS) Entrepreneurship (5 ECTS) Communication Skills 1 (5 ECTS)	**Compulsory Modules:** Numerical Methods for Partial Differential Equations (5 ECTS) Finite Element Method (5 ECTS) Continuum Mechanics (5 ECTS) Advanced Fluid Mechanics (5 ECTS) Communications skills in a foreign language (5 ECTS)	**Compulsory Modules:** Computational Solid Mechanics (5 ECTS) Domain Decomposition (5 ECTS) Finite Elements in Fluids (5 ECTS) Industrial training (15 ECTS)	**Compulsory Modules:** Entrepreneurship (5 ECTS) Industrial training (15 ECTS) **Elective Modules (choose 3 to complete 15 ECTS):** Nonlinear Continuum mechanics (5 ECTS) Computational Plasticity (5 ECTS) Fluid-Structure Interaction (5 ECTS) Computational Fluid Dynamics (5 ECTS) Reservoir modelling and simulation (5 ECTS)	**Compulsory Modules:** Communication Skills for Research Engineers (5 ECTS) equivalent to Com. Skills 2 (5 ECTS) Dynamics & Transient Analysis (5 ECTS) equivalent to Comp. Struct. Mech. Dyn. (5 ECTS) Case Study (10 ECTS) equivalent to Comp. Mech. Tools (5 ECTS) and one elective module (5 ECTS) **Elective Module** Advanced structural analysis (5 ECTS)	**Compulsory Modules:** Advanced Discretization Methods (5 ECTS) Communication Skills 2 (5 ECTS) Computational Mechanics Tools (5 ECTS)	**Elective Modules (choose 1 or 2 to complete 10 ECTS of Elective Modules between Q3 and Q4)** <mark>Note 1</mark> Nonlinear Continuum mechanics (5 ECTS) Computational Plasticity (5 ECTS) Fluid-Structure Interaction (5 ECTS) Computational Fluid Dynamics (5 ECTS) Reservoir modelling and simulation (5 ECTS)	**Compulsory Module** Domain Decomposition (5 ECTS) <mark>Note 2</mark> **Elective Modules (choose 2 to complete 10 ECTS)** <mark>Note 3</mark> Computational Solid Mechanics (5 ECTS) Comp. Struct. Mech. Dyn. (5 ECTS) Finite Elements in Fluids (5 ECTS)
				Research dissertation (30 ECTS)			
ECTS = 30	ECTS = 25	ECTS = 30	ECTS = 35	ECTS = 30	ECTS = 30	ECTS = 30	ECTS = 30

1) Academic Board will review and guarantee the equivalence of elective modules with MMNE study plan compulsory courses.
2) Master Thesis defence will meet the UPC rules.
<mark>Note 1:</mark> UPC student at Swansea: 20 ECTS of Compulsory Modules (Q3) + 10 ECTS of Elective modules (Q3 and Q4) + 30 ECTS of Research dissertation (Q3 and Q4)
<mark>Note 2:</mark> "Domain decomposition" compulsory because there is not a similar Module for Swansea students during Q2, and it is a compulsory module in MMNE study plan.
<mark>Note 3:</mark> The choice of the 2 Elective modules in Q4 must be approved by the Academic Board and coordinated with the choice of the 3 Elective modules in Q2. Examples:
- A student who did not take "Fluid-Structure Interaction" or "Computational Fluid Dynamics" in Q2 must take "Finite Elements in Fluids" in Q4.
- A student who did not take "Nonlinear Continuum Mechanics" or "Computational Plasticity" in Q2 must take "Computational Solid Mechanics" in Q4.