

European Qualifications Framework – Program Outcomes Connectivity Matrix - Civil Engineering

<div style="display: flex; justify-content: space-between;"> OUTCOMES EQF </div>	Knowledge	Skills	Competence	
	advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialized field of work or study	manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts	take responsibility for managing professional development of individuals and groups
Comprehend science and advanced mathematics subjects fundamental to engineering, [B2], (ABET 3a)	2*			
Apply knowledge of mathematics, science, and engineering to design and implement original, innovative and sustainable civil engineering systems or processes to meet desired needs within a greater societal context, [B6], (ABET 3a, 3c, 3h)	2	2		
Act professionally and ethically, [B3] (TEDU 2), (ABET 3f)				2
Appreciate cultural diversity, respect individual and cultural differences (A3) (TEDU 6)			1	1
Design and conduct experiments; analyze and interpret data, [B5], (ABET 3b)		1	1	
Identify, formulate, and solve engineering problems, [B6], (ABET 3e)	2	2	1	
Demonstrate effective oral and written professional skills in English, [B3], (TEDU 3), (TEDU 1), (ABET 3g)			2	2
Practice good working habits, time management, and self-discipline, [B3], (TEDU 4)			2	1
Display multidisciplinary teamwork skills, [B5] (TEDU 7), (ABET 3d)			2	1
Engage in life-long learning to face the future challenges and to achieve an enduring professional development, [B2], (TEDU 5), (ABET 3i)				2
Employ state-of-the-art engineering techniques and computing tools necessary for creative engineering solutions, [B5], (ABET 3j, 3k)		1	1	

* 2 implies stronger connectivity.