

Civil engineering is the application of physical and scientific principles for solving the problems of society, and its history is intricately linked to advances in understanding of **physics** and **mathematics** throughout history. Because civil engineering is a wide ranging profession, including several separate specialized sub-disciplines, its history is linked to knowledge of structures, materials science, geography, geology, **soils**, **hydrology**, **environment**, **mechanics** and other fields. Throughout ancient and medieval history most architectural design and construction was carried out by **artisans**, such as **stonemasons** and **carpenters**, rising to the role of **master builder**. Knowledge was retained in **guilds** and seldom supplanted by advances. Structures, roads and infrastructure that existed were repetitive, and increases in scale were incremental.^[14]