UCLouvain

ltarc1121

2024

Spatial geometry : exploration of descriptive drawing

3.00 credits	20.0 h + 10.0 h	Q2

Language :	French
Place of the course	Tournai
Main themes	This teaching unit is designed to provide the necessary mental flexibility to see in space and understand the representation of three dimensional objects. Moreover, the care required in making working drawings brings necessary rigour for strong graphic expression. Monge 2 : • Fold lines • Rotation • Pierce point • Volume Perspective Amount of sunshine
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 **Specific learning outcomes:** While developing vision in three dimensional space and graphic thinking, by the end of the course students will be able to • carry out operations to manipulate plane and lines in Monge's theory (Monge 2). • use axonometry and perspective. • manipulate complex surfaces through an understanding of their geometric properties. • describe a work of architecture in terms of light and shade using a theoretical or real source. **Contribution to the learning outcome reference framework:** **Express an architectural procedure** • Be familiar with, understand and use the codes for representing space, in three dimensions • Test and use relevant means of communication in relation to the target objectives • Express ideas clearly in oral, graphic and written form
Bibliography	GEOMETRIE DESCRIPTIVE, METHODE DE MONGE • « Dessin scientifique 1 » ; « Projection orthogonale et constructions géométriques » R. Verschraegen, Editions J. Van In-Lier, 1974. • « Dessin scientifique 2 » ; « Sections de cône ' Pénétrations ' Tracé géométrique des ombres ' Notions de géométrie descriptive » R. Verschraegen, Editions J. Van In-Lier (Belgium), 1973. • « Cours de géométrie descriptive ». « Méthode de Monge » H. De Sloovere, Maison d'édition A. De Boeck ' Bruxelles, 1968. • « Savoir faire de l'architecture ». « Dessin d'architecture à partir de la géométrie descriptive » Jean Aubert, Editions de la Villette, Paris, 2003 • « Cours de géométrie descriptive ». « Institut Saint-Louis, Bruxelles », Editions F. Van Muysewinkel, Schaerbeek, 1933.
Faculty or entity in charge	LOCI

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Architecture (Tournai)	ARCT1BA	3		