

# SYLLABUS <sup>1</sup>

## 1. Information about the program

1.1 Higher education institution	Politehnica University Timisoara
1.2 Faculty <sup>2</sup> / Department <sup>3</sup>	Civil Engineering Faculty/Department of Land Communication Ways, Foundations and Cadastre
1.3 Chair	—
1.4 Field of study (name/code <sup>4</sup> )	Civil Engineering/80 )
1.5 Study cycle	Bachelor
1.6 Study program (name/code/qualification)	Civil Engineering (in English)/10/Engineer

## 2. Information about the discipline

2.1 Name of discipline/ formative category <sup>5</sup>	Descriptive Geometry/DF						
2.2 Coordinator (holder) of course activities	Lecturer PhD. Eng. Cristina Otilia Voicu						
2.3 Coordinator (holder) of applied activities <sup>6</sup>	Lecturer PhD. Eng. Cristina Otilia Voicu						
2.4 Year of study <sup>7</sup>	I	2.5 Semester	1	2.6 Type of evaluation	D	2.7 Type of discipline <sup>8</sup>	DI

## 3. Total estimated time – hours / semester: direct teaching activities (fully assisted or partly assisted) and individual training activities (unassisted) <sup>9</sup>

3.1 Number of fully assisted hours / week	3 of which:	3.2 course	2	3.3 seminar / laboratory / project	1
3.1* Total number of fully assisted hours / semester	42 of which:	3.2* course	28	3.3* seminar / laboratory / project	14
3.4 Number of hours partially assisted / week	of which:	3.5 training		3.6 hours for diploma project elaboration	
3.4* Total number of hours partially assisted / semester	of which:	3.5* training		3.6* hours for diploma project elaboration	
3.7 Number of hours of unassisted activities / week	1 of which:	additional documentary hours in the library, on the specialized electronic platforms and on the field			0.25
		hours of individual study after manual, course support, bibliography and notes			0.5
		training seminars / laboratories, homework and papers, portfolios and essays			0.25
3.7* Number of hours of unassisted activities / semester	14 of which:	additional documentary hours in the library, on the specialized electronic platforms and on the field			3.5
		hours of individual study after manual, course support, bibliography and notes			7
		training seminars / laboratories, homework and papers, portfolios and essays			3.5
3.8 Total hours / week <sup>10</sup>	4				
3.8* Total hours /semester	56				
3.9 Number of credits	2				

## 4. Prerequisites (where applicable)

<sup>1</sup> The form corresponds to the Discipline File promoted by OMECTS 5703 / 18.12.2011 and to the requirements of the ARACIS Specific Standards valid from 01.10.2017.

<sup>2</sup> The name of the faculty which manages the educational curriculum to which the discipline belongs

<sup>3</sup> The name of the department entrusted with the discipline, and to which the course coordinator/holder belongs.

<sup>4</sup> The code provided in HG no.140 / 16.03.2017 or similar HGs updated annually shall be entered.

<sup>5</sup> Discipline falls under the educational curriculum in one of the following formative disciplines: Basic Discipline (DF), Domain Discipline (DD), Specialist Discipline (DS) or Complementary Discipline (DC).

<sup>6</sup> Application activities refer to: seminar (S) / laboratory (L) / project (P) / practice/training (Pr).

<sup>7</sup> Year of studies in which the discipline is provided in the curriculum.

<sup>8</sup> Discipline may have one of the following regimes: imposed discipline (DI), optional discipline (DO) or optional discipline (Df).

<sup>9</sup> The number of hours in the headings 3.1 \*, 3.2 \*, ..., 3.8 \* is obtained by multiplying by 14 (weeks) the number of hours in headings 3.1, 3.2, ..., 3.8. The information in sections 3.1, 3.4 and 3.7 is the verification keys used by ARACIS as: (3.1) + (3.4) ≥ 28 hours / wk. and (3.8) ≤ 40 hours / wk.

<sup>10</sup> The total number of hours / week is obtained by summing up the number of hours in points 3.1, 3.4 and 3.7.

4.1 Curriculum	<ul style="list-style-type: none"> <li>Mathematics, Technical Drawing</li> </ul>
4.2 Competencies	<ul style="list-style-type: none"> <li></li> </ul>

### 5. Conditions (where applicable)

5.1 of the course	<ul style="list-style-type: none"> <li>Classroom with projector and blackboard</li> </ul>
5.2 to conduct practical activities	<ul style="list-style-type: none"> <li>Classroom with projector and blackboard</li> </ul>

### 6. Specific competencies acquired through this discipline

Specific competencies	Drawing solids on paper using space sight
Professional competencies ascribed to the specific competencies	<ul style="list-style-type: none"> <li>Recognizing typical structures and structural elements, specific to the graduated study programme</li> <li>Design of structural elements in civil engineering, specific to graduated study programme</li> </ul>
Transversal competencies ascribed to the specific competencies	<ul style="list-style-type: none"> <li>Documentation in Romanian and foreign language, in view of professional and personal development, via continuous learning and efficient adaptation to the new technical specifications i</li> </ul>

### 7. Objectives of the discipline (based on the grid of specific competencies acquired - pct.6)

7.1 The general objective of the discipline	<ul style="list-style-type: none"> <li>Representation on plan of the solid corps, forming of space sight and an engineering type of thinking.</li> </ul>
7.2 Specific objectives	<ul style="list-style-type: none"> <li></li> </ul>

### 8. Content <sup>11</sup>

8.1 Course	Number of hours	Teaching methods <sup>12</sup>
The point	2	Presentation of the theoretical aspects, explications, discussions, solved problems
The line	4	
The plan	4	
The Descriptive geometry methods	6	
Polyhedra	4	
Rotation surfaces	4	
Axonometry perspective	2	
Quoted projection	2	

<sup>11</sup> It details all the didactic activities foreseen in the curriculum (lectures and seminar themes, the list of laboratory works, the content of the stages of project preparation, the theme of each practice stage). The titles of the laboratory work carried out on the stands shall be accompanied by the notation "(\*)".

<sup>12</sup> Presentation of the teaching methods will include the use of new technologies (e-mail, personalized web page, electronic resources etc.).

Bibliography <sup>13</sup> 1.Belea, G, Geometrie Descriptiva,Ed. Orizonturi Universitare,1999 . 2.Belea ,G. ,Geometrie Descriptiva, Ed Po litehnica ,2011. 3.Belea ,G, Voicu ,C. O., Elemente de Geometrie Descriptiva ,Note de curs,Ed Politehnica,2015		
<b>8.2 Applied activities <sup>14</sup></b>	<b>Number of hours</b>	<b>Teaching methods</b>
Representation of the point	2	
Line study	2	
Plan traces	2	
Descriptive geometry methods	4	
Polyhedra ,rotation surfaces	2	
Axonometry	2	
Bibliography <sup>15</sup> Belea,G.,Voicu, C.O.,Geometrie Descriptiva,Culegere de probleme Ed.Orizonturi Universitare,2002		

**9. Corroboration of the content of the discipline with the expectations of the main representatives of the epistemic community, professional associations and employers in the field afferent to the program**

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**10. Evaluation**

Type of activity	10.1 Evaluation criteria <sup>16</sup>	10.2 Evaluation methods	10.3 Share of the final grade
10.4 Course	The capacity to represent the solid figures on plan, to solve the intersection between solid corps and plans and to represent in different axis systems sold volumes.	Written examination	2/3
10.5 Applied activities	<b>S:</b> The capacity to solve different types of descriptive geometry problems.	Weekly plates with marks	1/3
	<b>L:</b>		
	<b>P<sup>17</sup>:</b>		
	<b>Pr:</b>		
<b>10.6 Minimum performance standard (minimum amount of knowledge necessary to pass the discipline and the way in which this knowledge is verified <sup>18</sup>)</b>			
• Minimum 5 mark for each problem on written exam and more than 5 for applied activity.			

<sup>13</sup> At least one title must belong to the discipline team and at least one title should refer to a reference work for discipline, national and international circulation, existing in the UPT library.

<sup>14</sup> Types of application activities are those specified in footnote 5. If the discipline contains several types of applicative activities then they are sequentially in the lines of the table below. The type of activity will be in a distinct line as: "Seminar:", "Laboratory:", "Project:" and / or "Practice/training".

<sup>15</sup> At least one title must belong to the discipline team.

<sup>16</sup> Syllabus must contain the procedure for assessing the discipline, specifying the criteria, methods and forms of assessment, as well as specifying the weightings assigned to them in the final grade. The evaluation criteria shall be formulated separately for each activity foreseen in the curriculum (course, seminar, laboratory, project). They will also refer to the forms of verification (homework, papers, etc.)

<sup>17</sup> In the case where the project is not a distinct discipline, this section also specifies how the outcome of the project evaluation makes the admission of the student conditional on the final assessment within the discipline.

<sup>18</sup> It will not explain how the promotion mark is awarded.

**Date of completion**

**Course coordinator  
(signature)**

**Coordinator of applied activities  
(signature)**

**Head of Department  
(signature)**

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**Date of approval in the Faculty  
Council <sup>19</sup>**

.....  
**Dean  
(signature)**

12.02.2018

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<sup>19</sup> The endorsement is preceded by the discussion of the board's view of the study program on the discipline record.