

# SYLLABUS

## 1. Information about the program

1.1 Higher education institution	UNIVERSITY POLITEHNICA OF TIMISOARA
1.2 Faculty <sup>1</sup> / Department <sup>2</sup>	ELECTRONICS, TELECOMUNICATON AND INFORMATION TECHNOLOGIES/Automation and Applied Informatics Department
1.3 Field of study (name/code <sup>3</sup> )	ELECTRONIC ENGINEERING, TELECOMUNICATION AND INFORMATION TECHNOLOGIES
1.4 Study cycle	License
1.5 Study program (name/code/qualification)	TST-ENG/20/20/10/100/10/TST-ENG

## 2. Information about the discipline

2.1 Name of discipline/ formative category <sup>4</sup>	Programming Language 2 / DF						
2.2 Coordinator (holder) of course activities	Assoc.Prof. Loredana STANCIU						
2.3 Coordinator (holder) of applied activities <sup>5</sup>	Eng. Mădălina Petrici						
2.4 Year of study <sup>6</sup>	2	2.5 Semester	3	2.6 Type of evaluation	D	2.7 Regime of discipline <sup>7</sup>	DI

## 3. Total estimated time – hours / semester: direct teaching activities (fully assisted or partly assisted) and individual training activities (unassisted) <sup>8</sup>

3.1 Number of fully assisted hours / week	4 of which:	3.2 course	2	3.3 seminar / laboratory / project	2
3.1* Total number of fully assisted hours / semester	56 of which:	3.2* course	28	3.3* seminar / laboratory / project	28
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	3.14 of which:	additional documentary hours in the library, on the specialized electronic platforms and on the field			1
		hours of individual study after manual, course support, bibliography and notes			0.6 4
		training seminars / laboratories, homework and papers, portfolios and essays			1.5
3.7* Number of hours of unassisted activities / semester	44 of which:	additional documentary hours in the library, on the specialized electronic platforms and on the field			14
		hours of individual study after manual, course support, bibliography and notes			9
		training seminars / laboratories, homework and papers, portfolios and essays			21
3.8 Total hours / week <sup>9</sup>	7.14				
3.8* Total hours /semester	100				
3.9 Number of credits	4				

## 4. Prerequisites (where applicable)

4.1 Curriculum	• Programming Language 1
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<sup>1</sup> The name of the faculty which manages the educational curriculum to which the discipline belongs

<sup>2</sup> The name of the department entrusted with the discipline, and to which the course coordinator/holder belongs.

<sup>3</sup> The code provided in HG - on the approval of the Nomenclature of fields and specializations / study programs, annually updated.

<sup>4</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>5</sup> Application activities refer to: seminar (S) / laboratory (L) / project (P) / practice/training (Pr).

<sup>6</sup> Year of studies in which the discipline is provided in the curriculum.

<sup>7</sup> Discipline may have one of the following regimes: imposed discipline (DI) or compulsory discipline (DOb)-for the other fundamental fields of studies offered by UPT, optional discipline (DO) or optional discipline (Df).

<sup>8</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>9</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.

4.2 Competencies	<ul style="list-style-type: none"> <li>• Good programming knowledge, algorithmic and logical thinking</li> </ul>
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### 5. Conditions (where applicable)

5.1 of the course	<ul style="list-style-type: none"> <li>• Class room with projector, whiteboard, Internet connection</li> </ul>
5.2 to conduct practical activities	<ul style="list-style-type: none"> <li>• Laboratory with max 20 computers, Java SDK 11 or later version, NetBeans</li> </ul>

### 6. Specific competencies acquired through this discipline

Specific competencies	<ul style="list-style-type: none"> <li>• Ability to understand fundamental concepts in web programming</li> <li>• Ability to create medium-level complexity programs in HTML language (which is the fundamental language of the World Wide Web), Javascript, and ASP.NET</li> </ul>
Professional competencies ascribed to the specific competencies	<ul style="list-style-type: none"> <li>• 3. Application of knowledge, concepts and basic methods related to computer system architecture, microprocessors, microcontrollers, programming languages and techniques.</li> </ul>
Transversal competencies ascribed to the specific competencies	<ul style="list-style-type: none"> <li>• 1. Methodical analysis of field-related problems aimed at identifying acknowledged solutions, thus ensuring the accomplishment of professional tasks.</li> <li>• 3. Adaptation to new technologies, professional and personal development through continuous training, using printed documentation sources, specialized software and electronic resources in Romanian and at least one foreign language.</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>• Acquiring basic concepts in web programming</li> </ul>
7.2 Specific objectives	<ul style="list-style-type: none"> <li>• Design and implementation of web pages, medium level of difficulty</li> </ul>

### 8. Content<sup>10</sup>

8.1 Course	Number of hours	Teaching methods <sup>11</sup>
1. HTML		Presentation of the theoretical aspects based on PowerPoint slides, discussions, examples All the course resources can be found on the UPT Virtual Campus course's page
a. Basic elements	3	
b. Lists, tables, links	2	
c. Images, sounds and videos	2	
d. Frames	1	
e. Forms	2	
f. Cascading style sheets	3	
2. Javascript		
a. Basic elements, variables, functions, instructions	2	
b. Events, access to the elements	2	
c. Objects	2	
3. ASP.NET		
a. Introduction, page structure	1	

<sup>10</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>11</sup> Presentation of the teaching methods will include the use of new technologies (e-mail, personalized web page, electronic resources etc.).

b. C# programming basics	1	
c. Web forms, Web controls	1	
d. Membership and users	3	
e. Databases	3	

Bibliography <sup>12</sup> 1) Loredana STANCIU, *Programming Language 2*, Electronic Online Notes for the Course, <https://cv.upt.ro/course/view.php?id=1997>  
2) Bruce LAWSON, Remy SHARP: "Introducing HTML5, Second edition", NewRiders, 2012  
<http://www.utoronto.ca/webdocs/HTMLdocs/NewHTML/htmlindex.html>  
3) Simon MACKIE: "The principles of Beautiful Web Design", eBook, SitePoint Pty, 2020  
4) <http://www.landofcode.com/html/>

8.2 Applied activities <sup>13</sup>	Number of hours	Teaching methods
Web pages using basic html elements	2	Theoretical presentation, discussions, explanations, case study, problem solving
Lists, Tables, Links	2	
Images, sounds and videos	2	
Frames	2	
Forms	2	
Cascading style sheets	2	
Javascript	8	
ASP.NET	8	

Bibliography <sup>14</sup> 1) Loredana STANCIU, *Programming Language 2*, Electronic Online Notes for the Course, <https://cv.upt.ro/course/view.php?id=1997>  
2) Bruce LAWSON, Remy SHARP: "Introducing HTML5, Second edition", NewRiders, 2012  
<http://www.utoronto.ca/webdocs/HTMLdocs/NewHTML/htmlindex.html>  
3) Simon MACKIE: "The principles of Beautiful Web Design", eBook, SitePoint Pty, 2020  
4) <http://www.landofcode.com/html/>

**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**

- Knowledge and programming skills offered by the course's content provide a plus to future engineers, enriching their knowledge and skills they have already acquired in other courses from the curricula.
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**10. Evaluation**

Type of activity	10.1 Evaluation criteria <sup>15</sup>	10.2 Evaluation methods	10.3 Share of the final grade
10.4 Course	Multiple choice tests with 30 questions, each one	Written test	66,67%

<sup>12</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>13</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>14</sup> At least one title must belong to the discipline team.  
<sup>15</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.)

	having five possible answers, only one correct.		
<b>10.5 Applied activities</b>	<b>S:</b>		
	<b>L:</b> Two tests, containing problems similar with the ones solved during the laboratories. The final mark will be the average of the test's marks.	Running code on the computer	33,33%
	<b>P<sup>16</sup>:</b>		
	<b>Pr:</b>		
<b>10.6 Minimum performance standard</b> (minimum amount of knowledge necessary to pass the discipline and the way in which this knowledge is verified <sup>17</sup> )			
<ul style="list-style-type: none"> <li>• At the exam: 50% correct answers</li> <li>• At the laboratory: create a web page containing basic Html elements, images, frames, forms and Javascripts</li> </ul>			

**Date of completion**

21.07.2023

**Course coordinator  
(signature)**

**Coordinator of applied activities  
(signature)**

**Head of Department  
(signature)**

**Date of approval in the Faculty Council <sup>18</sup>**

**Dean  
(signature)**

14.09.2023

<sup>16</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>17</sup> It will not explain how the promotion mark is awarded.

<sup>18</sup> The endorsement is preceded by the discussion of the board's view of the study program on the discipline record.