

## COURSE SYLLABUS

Academic year 2024-2025

### 1. Programme Information

1.1. Higher education institution	Lucian Blaga University of Sibiu
1.2. Faculty	Faculty of Engineering
1.3. Department	Department of Computer Science and Electrical and Electronics Engineering
1.4. Field of study	Computer Science and Information Technology
1.5. Level of study <sup>1</sup>	Master
1.6. Programme of study/qualification	EMBEDDED SYSTEMS

### 2. Course Information

2.1. Name of course	Ethics and Academic Integrity	Code	ES.104.CO
2.2. Course coordinator	Assoc. Prof. Ionel Daniel MORARIU, PhD		
2.3. Seminar/laboratory coordinator	associate professor Eng. Daniel Morariu, PhD		
2.4. Year of study <sup>2</sup>	1	2.5. Semester <sup>3</sup>	1
2.6. Evaluation form <sup>4</sup>	A/R		
2.7. Course type <sup>5</sup>	O	2.8. The formative category of the course <sup>6</sup>	C

### 3. Estimated Total Time

3.1. Course Extension within the Curriculum – Number of Hours per Week					
3.1.a. Lecture	3.1.b. Seminar	3.1.c. Laboratory	3.1.d. Project	3.1.e. Other	Total
1	0	0	0	0	1
3.2. Course Extension within the Curriculum – Total Number of Hours within the Curriculum					
3.2.a. Lecture	3.2.b. Seminar	3.2.c. Laboratory	3.2.d. Project	3.2.e. Other	Total <sup>7</sup>
14	0	0	0	0	14
<b>Time Distribution for Individual Study<sup>8</sup></b>					<b>Hours</b>
Learning by using course materials, references and personal notes					5
Additional learning by using library facilities, electronic databases and on-site information					5
Preparing seminars / laboratories, homework, portfolios and essays					14
Tutorial activities <sup>9</sup>					10
Exams <sup>10</sup>					2
<b>3.3. Total Individual Study Hours<sup>11</sup> (NOSI<sub>sem</sub>)</b>					<b>36</b>
<b>3.4. Total Hours in the Curriculum (NOAD<sub>sem</sub>)</b>					<b>14</b>
<b>3.5. Total Hours per Semester<sup>12</sup> (NOAD<sub>sem</sub> + NOSI<sub>sem</sub>)</b>					<b>50</b>
<b>3.6. No. of Hours / ECTS</b>					<b>25</b>
<b>3.7. Number of credits<sup>13</sup></b>					<b>2</b>

**4. Prerequisites (if needed)**

4.1. Courses that must be successfully completed first (from the curriculum) <sup>14</sup>	
4.2. Competencies	

**5. Conditions (where applicable)**

5.1. For course/lectures <sup>15</sup>	Video projector
5.2. For practical activities (lab/sem/pr/app) <sup>16</sup>	

**6. Specific competencies acquired<sup>17</sup>**

Number of credits assigned to the discipline <sup>18</sup>			Credits distribution by competencies <sup>19</sup>
2			
<b>6.1. Professional competencies</b>			
<b>6.2. Transversal competencies</b>	TC2	show initiative	1
	TC3	assume responsibility	1

**7. Course objectives (resulted from developed competencies)**

7.1. Main course objective	Adequate knowledge and use of discipline-specific notions Knowledge of the theoretical and practical content of the discipline Explaining and interpreting the similarities and differences between two fundamental terms: ethics and morality. Interpretation of the moral issues involved in the main themes of ethics in engineering: discrimination, plagiarism, corruption, etc.
7.2. Specific course objectives	Description of the ways of putting into practice the ethical theories and the possibilities of their manifestation in the major fields of fundamental ethics. Identify in specific case studies the moral issues involved in the main themes of ethics

**8. Content**

8.1. Lectures <sup>20</sup>		Teaching methods <sup>21</sup>	Hours
Lecture 1	Some concepts of Ethics and Morality.	Exposition, board, discussions with students	2
Lecture 2	Write a scientific paper. Elements of axiology and exploitation of scientific research.	Exposition, board, discussions with students	2
Lecture 3	Research methods in computer science. Ethics in research.	Exposition, board, discussions with students	2
Lecture 4	Ethics in statistical processing results. P-value and fraudulent use of the statistics.	Exposition, board, discussions with students	2
Lecture 5	Morality in computer science	Exposition, board, discussions with students	2



Lecture 6	"Publish or Perish" paradigm and necessity to go to a reproducible science.	Exposition, board, discussions with students	2
Lecture 7	Ethical Virtue: Courage and Justice	Exposition, board, discussions with students	2
<b>Total lecture hours:</b>			<b>14</b>

## 9. Bibliography

9.1. Recommended Bibliography	Bynum, Terrell Ward, "The foundation of computer ethics". ACM SIGCAS Computers and Society. 2000
	Floridi, Luciano . "Information Ethics: On the Theoretical Foundations of Computer Ethics", 1999
	L. N. VINȚAN – About the scientific values' falsification, Revista de politica științei și scientometrie, ISSN-L 1582-1218, Vol. 3, 2014,
9.2. Additional Bibliography	ACM Code of Ethics and Professional Conduct, <a href="https://www.acm.org/code-of-ethics">https://www.acm.org/code-of-ethics</a>
	John P. A. Ioannidis – "Why Most Published Research Findings Are False" <a href="https://doi.org/10.1371/journal.pmed.0020124">https://doi.org/10.1371/journal.pmed.0020124</a>
	Campbell and Kenny (1999) A primer on regression artefacts
	<a href="https://en.wikipedia.org/wiki/List_of_scientific_misconduct_incidents">https://en.wikipedia.org/wiki/List_of_scientific_misconduct_incidents</a>

## 10. Conjunction of the discipline's content with the expectations of the epistemic community, professional associations and significant employers of the specific study program<sup>22</sup>

There are regular discussions in the department to determine which are the priority elements in this area that should be discussed.

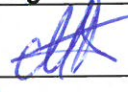
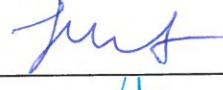


## 11. Evaluation

Activity Type	11.1 Evaluation Criteria	11.2 Evaluation Methods		11.3 Percentage in the Final Grade	Obs. <sup>23</sup>
11.4a Exam / Colloquy	• Theoretical and practical knowledge acquired (quantity, correctness, accuracy)	Tests during the semester <sup>24</sup> :	30%	100%	
		Homework:	15%		
		Other activities <sup>25</sup> :	15%		
		Final evaluation:	40%		
11.4b Seminar	• Frequency/relevance of participation or responses	Evidence of participation, portfolio of papers (reports, scientific summaries)		0%	
11.4c Laboratory	• Knowledge of the equipment, how to use specific tools; evaluation of tools, processing and interpretation of results	• Written questionnaire • Oral response • Laboratory notebook, experimental works, reports, etc. • Practical demonstration		0%	
11.4d Project	• The quality of the project, the correctness of the project documentation, the appropriate justification of the chosen solutions	• Self-evaluation, project presentation • Critical evaluation of a project		0%	
11.5 Minimum performance standard <sup>26</sup>					5

**The Course Syllabus will encompass components adapted to persons with special educational needs (SEN – people with disabilities and people with high potential), depending on their type and degree, at the level of all curricular elements (skills, objectives, contents, teaching methods, alternative assessment), in order to ensure fair opportunities in the academic training of all students, paying close attention to individual learning needs.**

Filling Date: 13.09.2024

Department Acceptance Date: 16.09.2024

	Academic Rank, Title, First Name, Last Name	Signature
Course Teacher	Assoc. Prof. Ionel Daniel MORARIU, PhD	
Study Program Coordinator	Prof. Arpad GELLERT, PhD	
Head of Department	Assoc. Prof. Radu George CREȚULESCU, PhD	
Dean	Prof. Maria VINȚAN, PhD	

<sup>1</sup> Bachelor / Master

<sup>2</sup> 1-4 for bachelor, 1-2 for master

<sup>3</sup> 1-8 for bachelor, 1-3 for master

<sup>4</sup> Exam, colloquium or VP A/R - from the curriculum

<sup>5</sup> Course type: R = Compulsory course; E = Elective course; O = Optional course

<sup>6</sup> Formative category: S = Specialty; F = Fundamental; C = Complementary; I = Fully assisted; P = Partially assisted; N = Unassisted

<sup>7</sup> Equal to 14 weeks x number of hours from point 3.1 (similar to 3.2.a.b.c.)

<sup>8</sup> The following lines refer to individual study; the total is completed at point 3.37.

<sup>9</sup> Between 7 and 14 hours

<sup>10</sup> Between 2 and 6 hours

<sup>11</sup> The sum of the values from the previous lines, which refer to individual study.

<sup>12</sup> The sum (3.5.) between the number of hours of direct teaching activity (NOAD) and the number of hours of individual study (NOSI) must be equal to the number of credits assigned to the discipline (point 3.7) x no. hours per credit (3.6.)

<sup>13</sup> The credit number is computed according to the following formula, being rounded to whole neighbouring values (either by subtraction or addition

$$\text{No. credits} = \frac{\text{NOCpSpD} \times C_C + \text{NOApSpD} \times C_A}{\text{TOCpSdP} \times C_C + \text{TOApSdP} \times C_A} \times 30 \text{ credits}$$

Where:

- NOCpSpD = Number of lecture hours / week / discipline for which the credits are calculated
- NOApSpD = Number of application hours (sem./lab./pro.) / week / discipline for which the credits are calculated
- TOCpSdP = Total number of course hours / week in the Curriculum
- TOApSdP = Total number of application hours (sem./lab./pro.) / week in the Curriculum
- C<sub>C</sub>/C<sub>A</sub> = Course coefficients / applications calculated according to the table

Coefficients	Course	Applications (S/L/P)
Bachelor	2	1
Master	2,5	1,5
Bachelor - foreign language	2,5	1,25

<sup>14</sup> The courses that should have been previously completed or equivalent will be mentioned

<sup>15</sup> Board, video projector, flipchart, specific teaching materials, online platforms, etc.

<sup>16</sup> Computing technology, software packages, experimental stands, online platforms, etc.

<sup>17</sup> Competences from the Grids related to the description of the study program, adapted to the specifics of the discipline





<sup>18</sup> From the curriculum

<sup>19</sup> The credits allocated to the course are distributed across professional and transversal competences according to the specifics of the discipline

<sup>20</sup> Chapter and paragraph titles

<sup>21</sup> Exposition, lecture, board presentation of the studied topic, use of video projector, discussions with students (for each chapter, if applicable)

<sup>22</sup> The relationship with other disciplines, the usefulness of the discipline on the labour market

<sup>23</sup> CPE – Conditions Exam Participation; nCPE – Does Not Condition Exam Participation; CEF - Conditions Final Evaluation; N/A – not applicable

<sup>24</sup> The number of tests and the weeks in which they will be taken will be specified

<sup>25</sup> Scientific circles, professional competitions, etc.

<sup>26</sup> The minimum performance standard in the competence grid of the study program is customized to the specifics of the discipline, if applicable

