## COURSE GUIDE – short form

Academic year 2024 - 2025

| Course name <sup>1</sup> | CHEMISTRY |                       |    | Course c      | ode | 1.IMAT.02.DF |   |                               |   |
|--------------------------|-----------|-----------------------|----|---------------|-----|--------------|---|-------------------------------|---|
| Course type <sup>2</sup> | DF        | Category <sup>3</sup> | DI | Year of study | 1   | Semester     | 1 | Number<br>of credit<br>points | 4 |

| Faculty        | Materials Science and Engineering | Number of teaching and learning hours <sup>4</sup> |    |   | ng |   |    |
|----------------|-----------------------------------|----------------------------------------------------|----|---|----|---|----|
| Field          | Materials Engineering             | Total                                              | L  | Т | LB | Р | IS |
| Specialization | Materials Science                 | 100                                                | 28 | - | 14 | - | 58 |

| Pre-requisites from the curriculum <sup>5</sup> | Compulsory  | It's not necessary |
|-------------------------------------------------|-------------|--------------------|
|                                                 | Recommended | It's not necessary |

| General<br>objective <sup>6</sup>   | <ul> <li>Discipline is a basic component in the curriculum structure of the field area, its objectives being entirely among the objectives of the curriculum;</li> <li>The main objective of the discipline involves learning, understanding and applying the theoretical and practical principles specific to Chemistry.</li> </ul>                                                                                                               |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Specific<br>objectives <sup>7</sup> | <ul> <li>The discipline offers theoretical and practical knowledge in the field of Chemistry;</li> <li>Presentation of basic theoretical concepts of Chemistry;</li> <li>Developing the ability to solve exercises and problems of Chemistry;</li> <li>Developing skills in practical / experimental activity in the Chemistry laboratory;</li> <li>Developing the ability to evaluate student achievement over a given period of time.</li> </ul> |
| Course<br>description <sup>8</sup>  | Chemistry, fundamental science of nature and its role in engineer training. Basics of: the atom, chemical elements, chemical bonds, substances (inorganic and organic), mixtures of substances (solutions, colloids), water, electrochemistry, lubricants.                                                                                                                                                                                         |

|                                                         | Assesment                                                                                                                                                                      |                     | Sche-<br>dule <sup>9</sup> | Percentage in the<br>final grade<br>(minimum<br>grade) <sup>90</sup> |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------|----------------------------------------------------------------------|
|                                                         | Class tests along the semester                                                                                                                                                 | 0 %                 | -                          |                                                                      |
| A. Final                                                | Home works: 1                                                                                                                                                                  | 30 %<br>(minimum 5) | week 7                     |                                                                      |
| assessment<br>form <sup>11</sup> :<br><b>colloquium</b> | Other activities                                                                                                                                                               | 0 %                 | -                          | 70 %                                                                 |
|                                                         | Examination procedures and conditions:<br>- Colloquium: answer to the exam; Tasks:<br>treating the theoretical topics and problem<br>solving; Working conditions: written exam | 70 %<br>(minimum 5) | week 14                    | (minimum 5)                                                          |
| B. Seminar                                              | 0 %                                                                                                                                                                            |                     |                            |                                                                      |
| C. Laboratory                                           | 30 %<br>(minimum 5)                                                                                                                                                            |                     |                            |                                                                      |
| D. Project                                              | 0 %                                                                                                                                                                            |                     |                            |                                                                      |

| Course organizer    | Associate Professor PhD Eng. Emil Ioan MUREŞAN |  |
|---------------------|------------------------------------------------|--|
| Teaching assistants | Associate Professor PhD Eng. Emil Ioan MUREŞAN |  |

<sup>2</sup> DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)

<sup>3</sup> DI – imposed, DO –optional, DL – facultative (from the curriculum)

<sup>9</sup>Course name from the curriculum

<sup>2</sup> DF – fundamental, DID – in the field, DS – specialty, DC – complementary (from the curriculum)

<sup>3</sup> DI – imposed, DO –optional, DL – facultative (from the curriculum)

<sup>4</sup> Points 3.8, 3.5, 3.6a,b,c, 3.7 from the Course guide – extended form (L-lecture, T-tutorial, LB-laboratory works, P-project, IS-individual study)

<sup>5</sup> According to 4.1 – Pre-requisites - from the Course guide – extended form

<sup>6</sup> According to 7.1 from the Course guide – extended form

<sup>7</sup> According to 7.2 from the Course guide – extended form

<sup>8</sup> Short description of the course, according to point 8 from the Course guide – extended form

 $^{9}$  For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period

<sup>10</sup> A minimum grade might be imposed for some assessment stages

<sup>11</sup> Exam or colloquium

<sup>&</sup>lt;sup>1</sup>Course name from the curriculum

<sup>&</sup>lt;sup>4</sup> Points 3.8, 3.5, 3.6a,b,c, 3.7 from the Course guide – extended form (L-lecture, T-tutorial, LB-laboratory works, P-project, IS-individual study)

<sup>&</sup>lt;sup>5</sup>According to 4.1 – Pre-requisites - from the Course guide – extended form

<sup>&</sup>lt;sup>6</sup>According to 7.1 from the Course guide – extended form

<sup>&</sup>lt;sup>7</sup> According to 7.2 from the Course guide – extended form

<sup>&</sup>lt;sup>8</sup> Short description of the course, according to point 8 from the Course guide – extended form