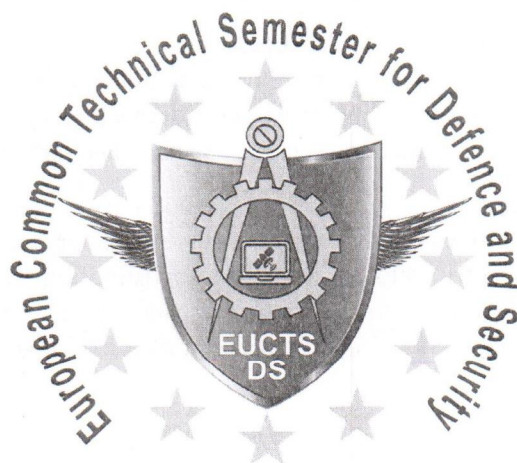


**CURRICULUM**  
for  
**EUROPEAN COMMON TECHNICAL SEMESTER FOR  
DEFENCE AND SECURITY (E<sub>u</sub>CTS<sub>DS</sub>)**



Duration	: 18 weeks
Period	: academic year 2022/2023
Study mode	: full-time
Participants	: international / Romanian undergraduate students
Certification	: graduation certificate

- Bucharest 2022 -



## DISCIPLINES, COURSE AND SYLLABUS DESIGN AND ASSESSMENT METHODS

No.	DISCIPLINES	Didactic activities					Individual study	ECTS
		C	S	L	P	Total		
1.	Applied Informatics	14	-	28	-	42	33	3
2.	Applied Automation for Engineering Systems	14	-	28	-	42	33	3
3.	Integrated Weapon Systems	14	-	28	-	42	33	3
4.	Common Security and Defence Policy for Technical Systems	14	28	-	-	42	33	3
5.	A. Computer Networks B. Propulsion Systems	14	-	28	-	42	33	3
6.	A. Programming Languages B. Dynamic of Flight	14	-	28	-	42	33	3
7.	A. Signal Processing B. Mechanics and Material Science	14	-	28	-	42	33	3
8.	A. Microcontrollers B. Computer-Aided-Design and Numerical Analysis	14	-	28	-	42	33	3
9.	Interdisciplinary Scientific Project	-	-	-	84	84	66	6
10.	Intercultural communication*	14	14	-	-	28	22	2
11.	Physical Education and Sports*	-	-	28	-	28	22	2
<b>TOTAL</b>		<b>126</b>	<b>42</b>	<b>224</b>	<b>84</b>	<b>476</b>	<b>374</b>	<b>34</b>

\* *Facultative disciplines*

### TEACHING OBJECTIVES AND COMPETENCIES

The **teaching objective** is to prepare the participants for the acquisition of professional and transversal competencies that allow them to develop projects in the field of technical defence and security systems in international, multidisciplinary and multicultural teams.

**Professional competencies:** analysis of the constructive-functional principles of technical systems; modeling and simulation of phenomena and processes specific to technical systems; designing the main components and/or manufacturing technologies for technical systems; testing, assessing and ensuring the quality of technical systems for defence and security; management of technical defence and security projects.

**Transversal competencies:** responsible execution of professional tasks based on documentation, logical reasoning, practical applicability, evaluation, self-evaluation and optimal decision; performing activities and employing specific teamwork roles on different responsibilities, as well as assigning tasks for subordinate levels based on communication, cooperation, mutual respect, and using the feedback to improve their own work and the spirit of initiative; professional communication in a multidisciplinary, multicultural and international context.





## REMARKS

1. The *European Common Technical Semester for Defence and Security* is conducted in English;
2. The semester has a duration of 18 weeks, of which 16 weeks for teaching activities, one week for the scientific project elaboration, and one week for scientific project defence;
3. The participants in the international semester are undergraduate students from international and national military academies/civilian universities.
4. Students from the Military Technical Academy "Ferdinand I" can participate in the International Semester, in which case the faculties of origin assume the recognition and the equivalence of academic achievements and ECTS credits;
5. The eligibility criteria for accepting Romanian and foreign students at the International Semester courses are as follows:
  - to be enrolled in a university degree program from abroad or from Romania;
  - to prove that they have completed at least one year of study in a bachelor's degree program;
  - to provide evidence of having at least a B2 English level;
6. The admission of candidates to fill vacancies for the international semester shall be done based on the overall average of the years of study completed, the candidates being nominated by the home institutions/faculties;
7. The disciplines 1÷8 are planned and carried out modularly (one discipline/2 weeks). Students can chose all disciplines or only a part of these disciplines, based on an option sheet. If a student will chose to no follow one discipline, he will take part in the activity of scientific project elaboration when this discipline is planned;
8. In the case of face-to-face activities suspension, the didactic and evaluation activities can be developed using the online education platforms agreed at institutional level, in blended-learning format.
9. The activities related to the scientific project are carried out in international teams of 4-6 students, the activity being supervised by the member of the teaching staff responsible for the project;
10. Upon graduation, the Military Technical Academy "Ferdinand I" issues a graduation certificate accompanied by the transcript of records;
11. The curriculum was validated by the Senate of the Military Technical Academy "Ferdinand I" in the meeting dated 21.06.2022.

**COMMANDANT (RECTOR) OF MILITARY TECHNICAL ACADEMY „FERDINAND I”**

*Brigadier General Prof. Eng. PhD.*

**Iulian-Constantin VIZITU**

**VICE-RECTOR FOR EDUCATION**

*Colonel Assoc. Prof. Eng. PhD.*

**Florin POPESCU**

**VICE-RECTOR FOR INTERUNIVERSITY RELATIONS**

*Capt. Cdr. Assoc. Prof. Eng. PhD.*

**Cristian-Emil MOLDOVEANU**



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