Ruse university “Angel Kanchev”, Bulgaria

Formal requirements

- participation of at least three universities from three Erasmus+ programme countries
- physical stay of min. 5 to max. 30 days
- min. 10 mobile students (= incomings) from all partners together
- obligatory virtual component of all participants
- grades will be awarded for all incoming students of at least 3 ECTS
- **Deadline for lists with nominated incoming student participants (incl. reserve list): 10.03.2026**
  Up to 2 participants/partner are allowed.

General information regarding the BIP

Title of the BIP	CHALLENGES AND SOLUTIONS IN ELECTRONICS
ID	№ 2025-1-BG01-KA131-HED-000321310-1
Field of study	0714
Study cycle	☒ BA ☐ MA ☐ PhD
Duration of the BIP (complete time frame, including virtual part) dd.mm.yyyy – dd.mm.yyyy	13.04.2026 - 24.04.2026
Physical exchange, excluding travel days dd.mm.yyyy – dd.mm.yyyy	20.04.2026 - 24.04.2026
Duration of the physical exchange (in days)	5
Virtual component dates	13.04.2026 - 17.04.2026
Duration virtual component (approximately, in days)	5
Planned number of all incoming students (min. 10)	20
ECTS of the course	3

Contact person

Responsible person at the University of Ruse who signs OLA	Assoc. Prof. Anka Krasteva, Email: akrasteva@uni-ruse.bg
BIP contact person at the University of Ruse	Assoc. Prof. Seher Kadirova Email: skadirova@uni-ruse.bg

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Content

Teaching language and level	English ☒ B1 ☐ B2 ☐ C1 ☐ C2
Objectives and Description	***Objectives:*** To provide students with a deeper understanding of the current challenges in the field of electronics, Internet of Things, data collection and data analysis. To foster critical thinking and problem-solving abilities by exploring real-world challenges in electronics and how innovative solutions are developed. The final product will be the prepared machine learning models, based on experimentally obtained IoT data, and a presentation. Facilitate collaboration among students from different universities and countries to share knowledge and diverse perspectives, simulating the interdisciplinary nature of modern electronic engineering. Presenting to students the latest trends, technologies, and practices. ***Description:*** The program aims to address the key obstacles and innovations currently shaping the field of electronics. It is designed for students pursuing engineering or related disciplines, offering them an opportunity to explore the technological and societal challenges that the electronics industry faces today. Participants will be engaged in teaching sessions, workshops, and case studies that cover a wide range of topics, including microcontrollers, sensors and actuators, circuit design, and emerging technologies such as IoT, and AI integration into electronic systems. Students will also be introduced to the interdisciplinary nature of modern electronics and encouraged to work alone / or ingroups on innovative ideas that address both current and future challenges in the field. By the end of the program, participants will not only have enhanced technical knowledge but also gained critical skills in teamwork.
Methods and outcomes	Methods: 1. Lectures and Seminars 2. Workshops

	3. Case Studies 4. Collaborative Group Projects 5. Research and Presentations Outcomes: 1. Increased Technical Knowledge 2. Improved Problem-Solving Skills 3. Interdisciplinary Collaboration 4. Innovation and Creativity 5. Improved Presentation and Communication Skills 6. Cultural Exchange and Global Perspective
Description of the virtual component	1. Introducing Bulgaria and Ruse university to participants 2. Discussing travel details 3. Lectures, presented by organizers and incoming staff 4. Mixed teams of students from different study programmes and countries continue to work on project results remotely. Teachers are mentoring and guiding students' groups through all remote work time period. On the last day of project groups represent results to each other and to the organisers.
Timing of the virtual component	☒ before the physical exchange ☐ before and after the physical exchange ☐ before and during the physical exchange ☐ before, during and after the physical exchange
Focus of the BIP	☒ digital transformation ☐ inclusion and diversity ☐ environment and fight against climate change ☐ participation in democratic life, common values and civic engagement ☐ other