Project: ESSENCE: Establishing Smart Energy System Curriculum
at Russian and Vietnamese Universities
Leading partner: RTU / P1 – responsible person - Anastasija Žiravecka

Peer-Review for the Courses Quality Evaluation

Peer-review form

*Correspondence to the requirements to peer-reviewer (*European and Partner universities*):*

1. Do You have Dr.sc.ing or Candidate of science or equivalent scientific (specify) degree in the field of Power and/or Electrical Engineering and/or ICT field? (yes/no)
2. Do You have teaching experience at a university for at least 5 years? (yes/no)
3. Do You have scientific publications within last 2 years in the area of expertise? (yes/no)

Correspondence to the requirements to peer-reviewer (Industrial Partners):

1. Do You have an engineer qualification or M.Sc. in the field of Power and/or Electrical Engineering and/or ICT field? (yes/no) : **Yes**
2. Is Your working experience in industry of the correspondent profile at least 5 years? (yes/no) : **Yes**

Is the form of the course description is fully filled in? ***Yes*** ___ *(no)*

Criterion	*Aspects*	*Justification / recommendation of the peer-reviewer*
General *0-5* ***4***	***Aims, objectives*** ***Level of expertise of a trainer/instructor*** ***Background/preliminary knowledge*** ***Way of realization***	1 : The aims and objective stated in the course description are clear, attainable, formulated in an understandable way, correspond to the expectations from the course. 2 : The instructors required in the course description correspond to the area of the course; to the level of the studies (master level). Beside the intructors have real experiments about working substation automation minimum 2 years. 3: The content is fine but I want to stress that the learners have to understand about network and protocol IEC61850 in relay systems. Nowday, Relays in the world are using protocol IEC 61850 and IEC61850-9-2 in the smart grid network. The other protocol IEC 103, DNP, MOSBUS are rarely used . 4: The way of realization is good . But time in lab practice should be increased to 25 and practical trainning to 20 (in

		part 2, part 3, part 4).
Content of the course 0-5 ***3***	***Course outline*** ***Study materials + information sources*** ***Laboratory works /Practical Classes*** ***Equipment required***	5 : It's good. 6 : It' ok. 7,8 : It's poor. I think the developers have to describe detail equiment to be implemented in the lab for example: relays, switchs, routesr, computers, device for relay testing, software … Those equiments are very important to learners' practive.
Results of the course 0-5 ***3,5***	***Learning outcomes*** ***CP number*** ***Type(s) of control + evaluation system***	9 : I think it ok. 10: The course is created in 6 ECTS, however the time distribution is not very good, the total times are not corresponding to 6 ECTS. 11. It's ok. But it should have some testing method for laboratory or practical evaluation

Interpretation of the scores **: 3,5**

Final decision: The syllabus description addresses the criterion well, but a number of shortcomings are present. I think the developer concentrate on the realities of substation. The developer focus on equiment using for lab , built the exercises on lab about relay testing and relay configuration. However something should be done to improve the quality of the syllabus: the time distribution of each parts, the total credits (6ECTS) are reasonable or not, the detail of "Structure and tasks of independent studies" must be identified clearly. The description of on-going purchase equipment should be more detailed. The evaluation method for lab work of learners.