

Course description

Tempus project EcoBRU

Course name
2 Motor transport, the impact on the air environment

Lecturer	Educational institution
Course Director: Shatalova E.E. Other team members: Galkina G.A., Myronyuk V.P., Meshcheryakov S.V.	RSUCE, Chair of the Transportation and Road Traffic

Deficit definition
The development of measures to reduce the negative impact of road transport on the environment

Required space in the training	Course level	Course type
Advanced training		MOODLE

Target group	Duration	Languages
college teachers	60	Russian

Conditions	
Conditions: Internet	Other requirements (if applicable)

Ladder Points (1 un.=30 h)	Total hours	Class work	Independent work (h)
2	60	30	30

Topicality for EcoBRU**
To give knowledge to develop and implement measures aimed at reducing the negative impact of motor transport on air environment, the creation of zones for comfortable living of the population.

Themes / Content	MOODLE	Hours and tasks for independent work
1. Development of measures aimed at reducing energy pollution	2	2
2. Determining the required acoustic efficiency of screens taking into account the absorption	4	4

3. Organizational measures to reduce pollutant emissions from motor vehicles in atmospheric air	2	2
4. The development of intelligent transport systems (ITS)	2	2
5. The use of simulation models in the planning of motor transport	4	4
6. The use of alternative fuel	4	4
7. Saving motor fuel	2	2
8. The use of alternative transport	4	4
9. Exploitation of Passenger Transport (application of the program called PIKAS)	2	2
10. Exploitation of cargo transport	2	2
11. Technical event. The installation of exhaust gas catalytic converters	2	2
TOTAL	60	

Forms of control and assessment			
Control form	Percentage ratio	Dates	Criteria of assessment
Test`s question (MOODLE)	30	within the framework of learning course	more than 59 %
Lecture on-line (MOODLE)	20		more than 59 %
Credit	50		«Credit» - student shows good knowledge of educational material on the topics of the course. While logical and consistent presented material, reveals the meaning of the question, gives the right answers to additional questions. «Fail» - listener is difficult respond to questions raised, give partial answers to the questions from the basic literature recommended for the course.

Terms and conditions of access to monitoring and assessment of knowledge (exam)
Test`s question (MOODLE) & Lecture on-line (MOODLE) more than 59

Document type certifying the successful course visiting (Certificate?)
Certificate of professional development

Organizational guidelines
Place: RSUCE
The recommended number of participants: no regulate

Literature and educational materials				
Author	Year of publishing	Title	Pages number	Place of publication, publisher or an online link
Basic literature				
Ю. В. Трофименко, Г.И. Евгенийев.	2006	Экология: Транспортное сооружение и окружающая среда: учеб. пособие для студ. высш. учеб. заведений	394	М.: Издательский центр «Академия»
М. В. Графкина	2009	Экология и экологическая безопасность автомобиля: учебник	320	М.: Форум
В. И. Жуков	2012	Оценка воздействия транспортно-дорожного комплекса на окружающую среду: учеб. пособие		[Электронный ресурс] Красноярск : Сиб. федер. ун-т
Additional resources				
И. С Туревский	2014	Охрана труда на автомобильном транспорте	240	М.: ИД ФОРУМ: НИЦ ИНФРА-М