













### **History**

- The High School of Railroad Applied Studies has a long history. School was founded in 1958 as state (public) school. Today, after the transformation of higher applied schools in Serbia, the Higher Applied Railroad School is a Department of the Academy of Technical and Art Applied Studies Belgrade.
- The school is financed partly from the budget of the Republic of Serbia, and partly from its own revenues, mainly from the tuition fees of students studying in the self-financing regime.





### **BACKGROUND ON THE SCHOOL**

The Department High Railway School of Applied Studies realizes basic applied studies of the first degree and master applied studies of the second degree of higher education, within the educational-scientific field of technical-technological sciences and the educational-scientific field of social-humanistic sciences. The school conducts study programs, which enable students to get involved in the work process and apply the acquired knowledge and skills in solving appropriate problems.





### **BACKGROUND ON THE SCHOOL**

The Department of Railway High School is an organizational unit of Academy of Technical and Art Applied Studies(ATUSS), without the status of a legal entity. The main activity of the Department of Higher Education is higher education which is realized in the fields of Technical, Technological and Social Humanities, narrower professional fields: Traffic Engineering, Mechanical **Engineering, Electrical and Computer Engineering and Economics. Studies are** realized through basic Applied studies (first degree of study) and master Applied studies (second degree of study) in accredited study programs.











The teaching-educational unit of the Department of Higher Education consists of narrower organizational units - study programs classified into study groups of study programs:

- 1. Study group for Traffic and Transportation
- 2. Study group for Mechanical Engineering, Electrical Eengineering and Computer Science
- 3. Study group for Economy and Commercial Business





### Study group for Traffic and Transportation, with study programs:

- 1. Study program of **Railroad Traffic and Transportation** (BsC), http://atuss.edu.rs/en/study-programme/4/rtt
- 2. Study program of **Urban**, **Public and Industrial Traffic** (BsC), http://atuss.edu.rs/en/study-programme/4/upit
- 3. Study program of **Traffic and Transport Engineering** (MsC), http://atuss.edu.rs/en/study-programme/4/tte





Study program of Railroad Traffic and Transportation (BsC)

The main goal of the study program Railway Traffic and Transportation is to adequately present and transfer knowledge of new techniques, technologies, and achievements applied in the railway transport sector in Europe and worldwide.

The specific goals of the study program Railway Traffic and Transportation are to: enable students for an independent and teamwork in a highly multidisciplinary railway environment, transfer theoretical knowledge and practical skills necessary for the development of abilities of students for creative thinking and decision making in solving specific operational problems in traffic and transportation, and fulfilling responsible tasks following railway safety standards;

integrate theoretical and practical knowledge as a basis for further development of creative abilities for work and knowledge improvement.





Study program of **Urban**, **Public and Industrial Traffic** (BsC)

The Urban Public and Industrial Transportation study program aims to enable students to acquire and perform general and professional knowledge and skills necessary for inclusion in the work processes in the field of urban and suburban public transportation, and industrial transport.

- The objectives of the Urban Public and Industrial Transportation study program are: to adequately present the topics of application, procedures, methods, and methodologies in the field of industrial and public urban transport;
- to integrate basic theoretical and practical knowledge in accordance with traffic and transportation demands;
- to ensure knowledge and practical skills needed by companies in the field of logistics, industrial, road, public urban, and railway transport;
- to obtain different levels of student ability to plan, organize, monitor, and regulate road traffic and transportation operations...





Study program of **Traffic and Transport Engineering** (MsC)

The main goal of the master study program Traffic and Transportation Engineering is the development of creative abilities and skills of students for the application of professional knowledge, and the latest scientific achievements in solving specific problems in the field of traffic, transportation, and logistics, especially problems concerning planning, organization, exploitation, and traffic safety.

By mastering the study program Traffic and Transportation Engineering, the student acquires the following qualifications and competencies:

application of mathematical methods of operations research, such as Multiple-criteria decision-making (MCDM), etc. in solving specific problems in the field of railway and road traffic and transportation; application of simulation methods; traffic monitoring and control; analysis, synthesis, consequence prediction, and development scenarios of solution in the field of railway and road traffic safety; logistic operation management; application of knowledge for improving logistics operation...











# Study group for Mechanical Engineering, Electrical Eengineering and Computer Science, with study programs:

- 1. Study program of Railroad Mechanical Engineering (BsC), http://atuss.edu.rs/en/study-programme/4/rme
- 2. Study program of Electrical Engineering in Traffic (BsC), http://atuss.edu.rs/en/study-programme/4/beet
- 3. Study program of Electrical Engineering in Traffic (MsC), http://atuss.edu.rs/en/study-programme/4/meet





Study program of Railroad Mechanical Engineering (BsC)

The main goal of the study program Railway Mechanical Engineering is to enable students to adopt and practically apply scientific and professional knowledge and achievements in the field of railway mechanical engineering.

The specific goals of the study program Railway Mechanical Engineering are to: transfer knowledge and practical skills necessary for work in a railway sector; develop professional creative abilities of a student necessary for work and solving specific and responsible tasks in the field of railway mechanical engineering; develop abilities of a student for monitoring of innovations in the given field; train students for teamwork and work in a versatile and multidisciplinary railway environment.





Study program of Electrical Engineering in Traffic (BsC)

The study program Electrical Engineering in Traffic aims to enable students to perform jobs in the field of electrical engineering, electronics, and new computer technologies in railway traffic.

The goals of the study program Electrical Engineering in Traffic are to: transfer knowledge and skills in the field of telecommunications, power plants, signaling and safety devices, and new computer technologies in railway traffic; to integrate basic technical and computer information knowledge and in accordance with the needs of production and service activities in architecture; create a basis for further development of creative abilities and knowledge necessary for work, monitoring of innovations in the given field; train students for teamwork and work in a highly multidisciplinary railway environment.





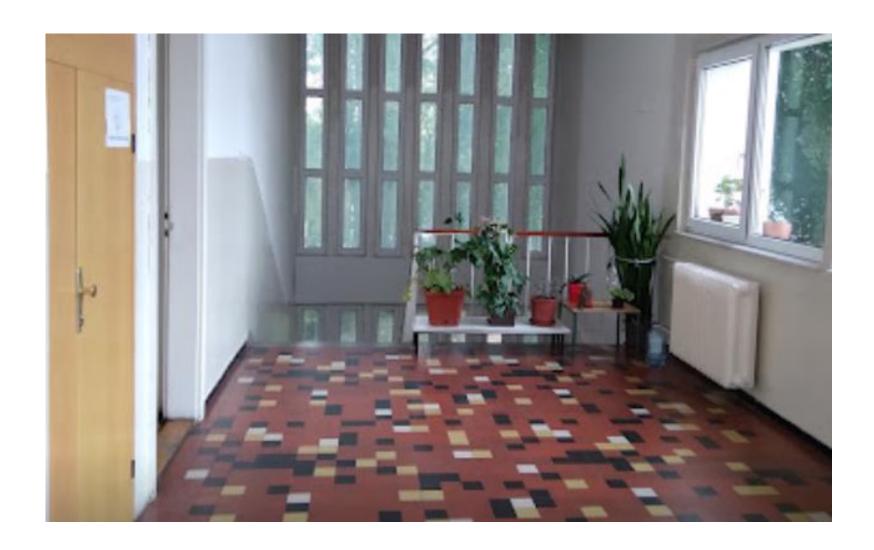
Study program of Electrical Engineering in Traffic (MsC)

The study program Electrical Engineering in Traffic aims to enable students to perform jobs in the field of electrical engineering, electronics, computing, telecommunications, signaling and safety systems, and new computer technologies in railway and other modes of transport.

The goals of the study program Electrical Engineering in Traffic are: to train professionals in the field of electrical engineering, electronics, computing, telecommunications, signaling and safety systems and new computer technologies in actions during procurement, installation, commissioning, operation, and maintenance of equipment, systems, and plants in transport companies and other organizations; to develop the ability to understand complex systems, networks, and modern technologies, which are in the service of safety, and undisturbed railway and other modes of transport...











### Study group for Economy and Commercial Business, with study programs:

- 1. Study program of Railroad Economy and Commercial Business (BsC), http://atuss.edu.rs/en/study-programme/4/recb
- 2. Study program of Economy and Commercial Business (MsC), http://atuss.edu.rs/en/study-programme/4/tecb





Study program of Railroad Economy and Commercial Business (BsC)

The goals of Railway Economy and Commercial Business study program are to enable students to apply the knowledge and skills needed to be included in the work process in the field of economic and commercial affairs on the railway. The study program is designed in accordance with the Law on Higher Education and the Bologna Declaration, whose course programs are focused in the first year on acquiring general education knowledge, and in the second and third year on acquiring professional and professional-applied knowledge for the application of railway economy.

Study program of basic applied studies Railway Economy and Commercial Businesss hould enable professional economists to master the necessary knowledge in order to professionally deal with the business of commercial business of the railway.





Study program of Economy and Commercial Business (MsC)

The goals of the master study program Transport Economy and Commercial Business include the development of creative abilities of students, skills, and knowledge for solving specific and responsible tasks and mastering the specific practical skills needed to perform this profession with the application and monitoring of innovations in the profession.

The specific goal of the master study program Transport Economy and Commercial Business is the education of professionals, for the needs of transport companies, that are competent to create an economically viable transport policy.

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# FUTURE PLANS FOR DUAL HIGHER EDUCATION

- 1. The High Railroad School of Applied Studies is the only school in Serbia and the region that educates staff for the needs of the Railroad.
- 2. The curricula for the occupations planned to be taught trough dual high education in High School of Railroad Applied Studies is still under development by the professors of applied studies employed in the Department. The structure of study programs, goals and outcomes are listed below.





