

Control in Technical Systems (Master)

Saint Petersburg Electrotechnical University "LETI"

Degree or qualification is awarded: **Master**

Language of study: **Russian**

Mode of study: **full-time**

Duration: **2 years**

Availability of free education: **yes**

Price: **208 000 rubles per year**

Programme webpage at the university website: <https://etu.ru/en/study/masters-degree/control-in-technical-systems>

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Automation and Control of Production Complexes and Portable Objects prepares students for design and development of control systems, and automation of high-tech industry sectors and special tech. Automated Systems of Marine Transport Control prepares students for design and development of stand-alone on-board (hull) electroenergetic systems. Ship Control and Data Systems prepares students for design and development of ship's data hubs. The following programs in Control in Technical Systems (27.04.04) are available:

- Automation and Control of the Production Complexes and Portable Objects (Department of Automatic Control Systems);
- Automated Systems of Marine Transport Control (Department of Automatic Control Systems);
- Ship Control and Data Systems (Department of Marine Control Systems).

Key points

Graduates of the Automation and Control of the Production Complexes and Portable Objects program are engaged in developing complex mechatronic systems, aircraft landing safety systems, intelligent control and automation systems based on microcontrollers, programmable logic controllers and other hardware platforms;

Graduates of the Automated Systems of Marine Transport Control Program are engaged in designing independent automated ship's power stations, electrical propulsion units, uniform electroenergetic heavy-duty systems; develop and implement control algorithms for automated ship's electroenergetic systems and electric propulsion units;

Graduates of the Ship Control and Data Systems program are engaged in designing information management systems for ship's equipment, complex ship control systems; automated electroenergetic ship's control systems; movement and equipment control systems

Training facilities

Theoretical part of the training is backed up by practical work at the following labs:

- Information and telecommunication technology;

- Industrial control and automation systems;
- Siemens automation and electric drives;
- Mechatronic complexes for movable objects and mobile equipment for airfield services;
- Resource centre including:
 - Multifunctional research complexes using virtual instrumentation;
 - Layout complex for microcontroller adaptive control system research;
 - Automated layout complex for standard production electromechanic facilities and research of modern control and automation systems for these facilities.
 - Automated systems of marine transport;
 - Uniform electroenergetic systems for ships;
 - Ship's systems of information and control;
 - Steering gears and systems;
 - Computing lab.

Specializations within this programme

Your future career

Graduates are successfully employed in many countries such as USA, Great Britain, Germany, France, Sweden, etc. Our graduates are in demand in the fields of oil and gas industry, power engineering, civil aviation equipment, shipbuilding, instrument making, machine-building and other industries in Russia and abroad. Program graduates are working as:

- Software engineers;
- Designers and developers of automation systems;
- Developers of dispatching system;
- Developers of technical objects control system;
- Service engineers for electric drives and communication systems.

Graduates are working in the leading foreign and Russian companies:

- SIEMENS;
- REP Holding;
- Elektropribor Group;
- ABB;
- AVRORA Group, Scientific & Production Association;
- Navis Inc Design Bureau;
- Transas Harmonized Eco System of Integrated Solutions (THESIS);
- Krylov State Research Centre;
- Central Marine Design Bureau “Almaz”;
- Central Design Bureau for Marine Engineering “Rubin”.