### Master's degree programs in English

**Tomsk State University** 

Tomsk dtate omversity	General Information	Important information	Courses	Graduates' areas of activity:
Siberia and Arctic Studies  http://tssw.ru/page/new-master-s-programme-siberia-and-arctic-studies/	The program is aimed at training highly qualified experts of scientific profile who possess a wide range of knowledge about the natural conditions of Siberia and Arctic, who works with modern methods of environmental research and scientific methodology. The program is aimed at inter- and transdisciplinary research of unique characteristic features and global significance of the Siberian megaregion.  "Siberian and Arctic Studies" program will be implemented by the University Centre of Excellence "BioClimLand" jointly with Institute of Biology, Faculty of Physics, and Faculty of Chemistry.	Applicants must have Bachelor's/specialist's degree in natural science. English and Russian languages skills sufficient for participation in high- education program are also required (B2).  Duration: 2 years Language of education: Russian, English		<ul> <li>Scientific and research activity;</li> <li>Design and production activity;</li> <li>Control and expert activity;</li> <li>Organizational and managing activity;</li> <li>Teaching activity in a higher educational institution.</li> </ul>
Recultivation and bioremediation of soils and water bodies http://tssw.ru/page/new-master-s-programme-recultivation-and-bioremiditation-of-soils-and-water-bodies-/	The master's programme gives students professional knowledge in the following areas: soils recultivation which were contaminated as a result of manmade and natural disasters; recovery of natural productivity of water bodies and agrosystems; recultivation of lands disturbed by building linear constructions. The professional training of master's graduates will allow them to head and conduct work in scientific and research institutes in ecological departments of large manufacturing companies, design and survey			<ul> <li>Scientific and research activity;</li> <li>Design and production activity;</li> <li>Control and expert activity;</li> <li>Organizational and managing activity;</li> <li>Teaching in a higher educational institution The master's program is oriented at the potential employers:         <ul> <li>Oblokompriroda",</li> <li>Department of Natural Resources and</li> </ul> </li> </ul>

	departments, bureaus, centres, companies, institutes in the sphere of ecology and management of natural recourses.  Training on the program Reconstruction and bioremediation of soils and water bodies will be implemented by Institute of Biology together with the University's Centre of Excellence "BioClimLand".		Environmental Protection of the Tomsk region, federal and regional bodies of environmental protection, scientific and research institutes (Tomsk Oil and Gas Research and Design Institute, Tomsk Trust of Construction- Engineering Exploration, Institute of Monitoring of Climatic and Ecological Systems of the Siberian Branch of the Russian Academy of Science, Scientific and Research Institute of Biology and biophysics of TSU, etc.), production facilities ("Rosneft", "LUKOIL", "Tomskneftekhim", "Tomskgas", "Siberian Chemical Combine", and etc.).
Geography and water and climate resources http://tssw.ru/page/geography-and-water-and-climate-resources/	Tomsk State University is the only higher educational institute in Asian part of Russia which has all necessary conditions and facility to train modern highly qualified specialists in the field of geoecology and estimation of water and climate resources, hydrology of swampy territories, forecasting and regulation of directions and intensity of anthropogenic impact on swampy territory ecosystems, and others. The competitive ability of the program is ensured by presence of constantly relevant contacts with	The most significant courses of the program:  Theory of General Atmosphere Circulation Atmospheric Electricity Aviation Weather Forecasts Satellite Information in Applied Purposes» Regional Ecology	There is an activity connected with the investigation of the atmosphere, continental waters, oceans' and seas' waters, climate changing, including:  Scientific and research activity; Design and exploration activity; Teaching activity; Operative and productive activity.

employers, course orientations in
accordance with competences
required by the employers and the
endless work on an advanced
vocational training of the teaching
stuff of the department of hydrology
and the department of meteorology
and climatology.

Aim of the program -advancing training of master students as highly professional specialists in the areas of climate and hydrological resources. A graduate should possess a creative application of knowledge about modern tasks and problems of climatology. climatological data processing, creative activity in hydrological processes investigation, current technologies and methods of organization of engineering and hydro meteorological and engineering and ecological explorations and examinations during swampy territories reclamation.

- Physical Basics of Impact on Atmospheric Processes
- Computer Technologies in Hydrometeorology
- Modern Forecasting Models in Numerical Weather Forecasting.

Internships and practical trainings take place in regional and national centers of hydrometeorology and monitoring of environment, scientific and research institutes and other organizations connected with atmosphere studies, hydrosphere and climate changing studies.

Specialists of the given areas are in demand in different sectors of national economy including nongovernmental structures. There is a possibility to work in the areas related to managerial and production activities in branches of "Roshydromet", "Aviamettelecom". **EMERCOM** and Civil Defense, PJSC "Tomskgeomonitoring" and committees on environmental defense of different level (urban, regional).

## Historical and Regional Geology

http://tssw.ru/page/historicalsciences-and-archaeologypostgraduate-phd/ The program provides a deep natural science education in the field of stratigraphy, paleontology, regional geology, geodynamics and environmental geology. The ability to conduct scientific research and solve production problems is formed with the participation of students in basic research conducted by departmental laboratories, and also during research placements in leading geological organizations and institutions.

The most important courses in the Historical and Regional Geology program are:

- Theoretical Problems of Stratigraphy;
- Paleontology and Evolutionary Theory;
- Evolution of the Biosphere;
- Sedimentology;

- scientific research activity;
- projectexploratory activity;
- teaching activity;
- entrepreneurship.

The graduates of the master's programme in Historical and Regional Geology are in demand for work in geological,

	The competitiveness of the programme is ensured by the teaching staff's high level of professionalism and academic links with both domestic and international researchers.	<ul> <li>Fundamentals of Geodynamic Analysis;</li> <li>Minerageny;</li> <li>Geo-ecology;</li> <li>Problems of Mineral Raw Materials' Complex Usage.</li> </ul>	project, mining and environmental companies of Krasnoyarsk Territory, Kemerovo and Tyumen regions, the Far East, and the countries of the CIS which are situated close to Tomsk.
Russian as a foreign language http://tssw.ru/page/russian-as-a-foreign-language/	The programme is designed for educating Master students in Linguistics with deep and comprehensive knowledge of the methods of teaching Russian as a foreign language capable of independent research and methodological work, and teaching. Practical approach plays an important role and is aimed at developing undergraduates' skills in teaching international students various aspects of Russian language to, oral and written speech, Linguistic and Cultural Studies and provides future teachers of Russian with knowledge of the ways for developing communicative competence of international students.  The purpose of the programme is to train highly qualified professionals capable of independent research and methodological work, and teaching activities and having profound, comprehensive expertise in methods of teaching Russian as a foreign language and professional skills in teaching Russian language.	Preparing students on Master's programme "Russian as a foreign language" includes courses of general scientific and professional cycles. Methodical aspect has an important place in the programme (specialization subjects) and is aimed at developing students' skills in teaching various aspects of the Russian language, oral and written speech, Linguistic and Cultural Studies and provides future teachers of Russian with knowledge of the ways for developing communicative competence of international students.  Besides the main subjects the programme also includes elective courses focused on expanding and	<ul> <li>Teaching;</li> <li>Research and development;</li> <li>Expert and analytical activity;</li> <li>Cultural and educational activities.</li> </ul>

deepening the ideas of actual problems in teaching linguistic disciplines in the field of teaching Russian as a foreign language.
The list of unique disciplines offered includes:
<ul> <li>Philology in Humanities system;</li> <li>Linguistics of the 20thcentury: methodologies and theories;</li> <li>Text Linguistics;</li> <li>Cultural Linguistics;</li> <li>Active Processes in Modern Russian Language;</li> <li>Theory and Practice of Intercultural Communication;</li> <li>Communicative Speech Quality and Functional Stylistics;</li> <li>The Basic Principles and Methods of Teaching Russian as a Foreign Language;</li> <li>Actual Problems of</li> </ul>
Teaching Linguistic disciplines in the aspect of teaching Russian as a Foreign Language;
Linguo-Didactic     Testing Basics;

		<ul> <li>Interpretation of Fiction and Nonfiction Text in an international audience;</li> <li>Forms of Work, Assessment Tools and Training Quality Control in the Methods of teaching Russian as a Foreign Language.</li> </ul>	
Russian Literature and Its European Communications http://tssw.ru/page/russian-literature-and-its-european-communications/	The program is designed for Master's students willing to take advanced study in History of Russian Literature in the context of national and world history and culture. The objectives of the program include developing a methodological heritage of research schools dealing with Russian Literature, as well introduction to modern scientific concepts and research methods in the field of History of Russian Literature and Comparative Studies. Mastery of modern technologies of literary education in high school is an important objective of the programme.  The partners of the programme and databases for research and language practices are University of Naples, University of Rome, and Berlin University (academic exchange programs).  The purpose of the program is to prepare experts who are aware of	The contents of the programme defines a set of special disciplines deepening understanding of the development of Russian literature and shaping competences in the study of international literary connections and intercultural communication.  • "Russian Literature of the XIX century reflected in social and philosophical thought"  • "Russian literature in XX-XXI centuries"  • "History and Theory of Comparative Studies"  • "Imagology"  • "Multicultural studies"  • "Theory and Practice of Literary Translation"	<ul> <li>Teaching;</li> <li>Research and development;</li> <li>Expert and analytical activity;</li> <li>Cultural and educational activities.</li> </ul>

the current state in the history of Russian and foreign literature, basic theoretical concepts of Comparative Studies, are able to critically evaluate new theoretical ideas and approaches, to think creatively and to offer new solutions for the burning issues of Literary Theory. The programme aims to improve students' understanding of the world	"Russian-European Literary Connections"
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literary process, to reflect a modern	
view of the main artistic values and	
tendencies in the development of	
Russian-European relations with the	
combination of aesthetic and socio-	
cultural approaches.	

Historical Sciences and Archaeology (Postgraduate - PhD)  http://tssw.ru/page/historical-and-regional-geology/	Post-graduate programme (PhD) aims at improving students' personal traits and developing universal overall and specific professional competences. The main purpose of the programme is educating research and pedagogical personnel capable of effective and comprehensive action in the field of science and education in the direction of 46.06.01 Historical sciences and archeology.		<ul> <li>National History;</li> <li>World History;</li> <li>Archaeology;</li> <li>Ethnography, Ethnology and Anthropology;</li> <li>Historiography, Sources Studies and Methods of Historical Research;</li> <li>History of Science and Technology</li> </ul>	<ul> <li>Research activities in the field of History and related Social Sciences and Humanities;</li> <li>Teaching activities in the field of Historical Sciences.</li> </ul>
Geology of Mineral Resources  http://tssw.ru/page/geology-of-mineral-resources/	The concept of the programme is to provide a deep natural science education in the field of mineralogy, petrology, lithology, geology and geochemistry of mineral resources. The ability to conduct research and solve production problems is formed with the participation of students in basic research carried out by departmental laboratories, and also during research placements in leading geological organizations and institutions. This allows the graduate to carry out research, design and management activities. The competitiveness of the programme is ensured by the teaching staff's high level of professionalism, and academic links with both domestic and international researchers.	The most important courses in the Geology of Mineral Resources programme are:  • Genetic Mineralogy; • Structural Analysis of the Crystalline Complexes; • Magmatic Formations; • Sedimentary Facies and Formations; • Litho-Facial Analysis; • Structures of Ore Field and Deposits; • Prediction, Prospecting and Exploration of Mineral Deposits.		<ul> <li>Scientific research activity;</li> <li>project-exploratory activity;</li> <li>teaching activity;</li> <li>entrepreneurship.</li> <li>The graduates of the master's programme in Geology of Mineral Resources are in demand for work in geological, project, mining and environmental companies of Krasnoyarsk Territory, Kemerovo and Tyumen regions, the Far East, and the countries of the CIS which are situated close to Tomsk.</li> </ul>

Earth Sciences	The programme is aimed at the	Scientific research
(postgraduate study)	development of personal qualities	activity in the field of
(posigraduate study)	and the formation of universal,	Earth Sciences (in
	general professional and	accordance with the
http://tssw.ru/page/earth-	professional competences among	educational
	the postgraduates. The area of	specialization);
sciences-postgraduate-study/	professional activity involves solving	Teaching activity in
	problems that require the application	educational programs of
	of basic and applied knowledge in	higher education.
	the field of Earth Sciences.	

## Anthropology and ethnology

http://tssw.ru/page/anthropologyand-ethnology/ The programme Anthropology and Ethnology is intended to identify specific areas of interdisciplinary interaction and is designed for training highly qualified personnel for basic and applied science and the system of HPE within the interests of sustainable development and security of Siberia in the ethnopolitical space of Russia, as well as in the development of possible scenarios of interaction between the region and bordering territories and countries in Asia, Europe, and America.

The list of unique professional courses read within the programme:

- City anthropology
- Anthropology of a modern conflict
- Methodology of modern sociological research
- National Identity in Europe in the context of globalization
- Semiotic approach in humanities and social sciences
- Methods for the conceptualization of world history
- Old Believers in the Frontier
- The phenomenon of nomadic movement and its anthropology
- Ethnic and confessional processes in East Asia
- Ethno-cultural history and demographic processes in the world
- Ethno-psychology of peoples of East Asia
- Legal Anthropology

- research;
- expert-analytical;
- pedagogical;
- cultural and educational;
- organizational and managerial activities.

Siberia: modern development, culture, history (Russian Studies: Siberia)

http://tssw.ru/page/a-newautonomous-master-sprogramme-siberia-moderndevelopment-culture-historyrussian-studies-siber/

Globalization, internationalization and regionalization have led to increased international and crossborder cooperation. For further development of the Russian regions, cities, institutions and TSU in particular active participation in these processes is required. On the one hand, the goal is facilitated by a stable and growing interest in the world to Siberia, to the potential of its regions and to the University. On the other hand. Siberian regions need to show their characteristics and their potential in order to become a member of international cooperation. That is the objective of the programme Siberia: modern development, culture, history (Russian Studies: Siberia). The programme is designed for foreign students who after their graduation plan to work in government, business structures, the expertanalytical centres and cultural organizations interested in the development of mutually beneficial relations with Russia and its regions and with Tomsk State University.

The programme contains the base module consisting of the courses on the theory and general practice of studies of Russian regions, as well as survey courses on main subject areas. The elective part of the programme consists of seven modules:

- Economic and legal support of business in Siberia;
- Historical and Cultural Heritage of Siberia;
- Social and Political Sphere of Siberia;
- Siberian Philology (Linguistics and Literary Studies);
- Ethnography and Anthropology of Siberia;
- External and Interregional Relations of the Regions of Siberia;
- Geography and Resource Potential of Siberia.

- research;
- expert-analytical;
- pedagogical;
- cultural and educational;
- organizational and managerial.

Culturology (postgraduate programme PhD)  http://tssw.ru/page/culturology-postgraduate-programme-phd/	The main aim of the programme Culturology is to develop personal qualities and form general and professional competences in postgraduate students.  Educational program specialization:		<ul> <li>research in the field of culturology and documentary information related to the major;</li> <li>pedagogical activities in the educational programmes of higher</li> </ul>
	<ul> <li>Theory and history of culture</li> <li>Museology, preservation and restoration of historical and cultural sites</li> </ul>		<ul> <li>education;</li> <li>expert activities in the field of culture;</li> <li>cultural and educational activities.</li> </ul>

#### Innovation Technologies and Agribusiness Industry (AI)

http://tssw.ru/page/innovationtechnologies-and-agribusinessindustry-ai/ In accordance to doctrine of food security, strategic goal of Russian policy is to ensure reliable supply of the citizens with safety and quality agricultural products.

Master's programme Innovation Technologies and Agribusiness Industry provides students with professional knowledge and skills in the areas of crop production, biological plant protection and agricultural biotechnology. The present programme is aimed at solving a number of issues related to production of quality agricultural products and consulting activities for agricultural enterprises of all forms of ownership. The students will be able to work in agricultural and biotechnological research institutes. breeding centres, laboratories engaged in the production of biological products, in information and consulting services, at universities.

The programme's aim is to equip specialists with all necessary knowledge and skills for working in agricultural sector and solving complex problems of AI.

The master's programme includes three modules:

- Crop Production;
- Biological Plant Protection;
- Agricultural Biotechnology.

The present programme include the following courses providing the target competences:

- Biology Agricultural Crops;
- Biotechnology for Plant Protection and Microbiological Fertilizers;
- Micromycetes in Plant Protection;
- Theoretical Basis of Advanced Technologies in Agronomy;
- Theoretical Foundations for Harvest Programming;
- Crop Production for Covered Ground;
- Agricultural Biotechnology;
- Environmental Biotechnology;
- Electrification and Automation of Agricultural and

- nme es:
  - Managerial activities;

Teaching

activities;

- Research activities;
- R&D activities.

Due to obtained knowledge and skills the students will be able to continue education as postgraduate students, work at different research organizations and production companies in agricultural sector, such as: Krasota SM, SAVA, Lama, and Siberian Agrarian Group.

	Biotechnological Production;  • Methods of Phytopathological Studies; • Entomophages for Plant Protection and others.
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#### Ecology and Environmental Management

http://tssw.ru/page/ecology-and-environmental-management/

The present programme equips students with advanced knowledge which allow them to use legal, administrative and economic technologies for environmental management and environmental protection. The students will be able to analyze, organize, and plan activities of state organizations connected with environmental management and its preservation. This programme is focused both on research and applied activities.

Aim of the programme is to train highly qualified specialists in the field of administrative activity who will be able to make ecologically important management decisions that ensure rational use of natural resources, ecological safety of the population and the long-term sustainable development of the region and the state as a whole.

The list of courses directly reflects the programme's aims and includes the following: Environmental Design, Use of Geo-information Technologies. Engineering and Environmental Surveys, Environmental Audit. and others. These courses allow the students to be successful in the mentioned areas of activities. Internships, practical trainings and research activities facilitate training of the specialists. Internships and practical trainings can be carried out at the University's laboratories and departments, and external organisations.

- · Research activities;
- Design and production activities;
- Control and expert activities;
- Organizational and management activities;
- Teaching at the university.

The programme's graduates will be able to work at state bodies and various federal and regional organizations operated in the areas of environmental protection. environmental management, industry, research institutions, development organizations, and other structures related to environmental protection. These organizations clearly indicate their demand in these specialists.

#### Chemical and Physical Methods of Research in Environmental and Forensics Expertise

http://tssw.ru/page/chemicaland-physical-methods-ofresearch-in-environmental-andforensics-expertise/ The Master Chemical and Physical Methods of Research in **Environmental and Forensics** Expertise aims at preparing professionals who will identify chemical composition of natural and man-made objects with modern chemical and physical methods. The programme alumni will have all the necessary law background, master the methodology and skills of experimental and theoretical analysis which will allow them to be highly-qualified experts in the stated professional field. The programme provides both solid theoretical and professional background in the fields of

The programme provides both solid theoretical and professional background in the fields of chemical ecology, forensics chemistry and chemical and physical research methods as well as practical skills of working with the cutting-edge analytical equipment and analyzing the expertise data.

- Key Issues of Contemporary Chemistry
- Chemical ecology
- Chemical and Physical Methods of Materials and Substances Diagnostics
- Basics of Criminal Law
- Forensics Chemistry and Toxicology
- Scientific Basics of Forensics

- Research activities;
- Organizational and management activities.

## Siberia for Russia and the World

http://tssw.ru/page/siberia-for-russia-and-the-world/

The programme alumni's professional competencies will be demanded in the field of providing a wide range of services communicational, informational, analytical, educational ones for those requiring complex overall information on the Russian Federation and its regions. The graduates' professional activity will be connected with examination of political, social, economic, demographic, cultural, religious and other phenomena occurring at the regional and inter-regional levels in contemporary Russia.

- Cultural Domain of Siberian Region
- Russian and Siberian Identity: Their Shaping and Interaction
- Ethnopolitical and Ethnosocial Processes in Siberia
- Siberian Region:
   Political Institutuion,
   Legal Framework and
   Stakeholders
- Siberia within the period of XIX – XXI centuries: Power and Society
- Scientific and Technical Potential of Siberia: Issues and Prospects of Modernization
- Social Development of Siberia: Issues of Transitional Period
- Central Asia in World Policy

- · Research activities;
- Organizational and management activities;
- expert-analytical activities.

Siberian Studies:
History and Modern
Period

http://tssw.ru/page/siberianstudies-history-and-modernperiod/ The fundamental studies of the field will provide the programme alumni with deep knowledge and comprehension of how various processes (cultural, political, economic, psychological ones) in the Social life of Siberia interact. The programme graduates with their solid intellectual and humanities background will be on high demand in a wide range of governmental, analytical, informational and educational professional institutions.

- Modern Approaches to Source Analysis in Siberian Studies
- History of Higher Education in Siberia (1920th-s – beginning of the XXI century)
- Siberia: Strategies for Economy and Social Sphere Modernisation
- External Affairs of Russian Regions within the period of XIX – XXI centuries: Power and Society
- Historical Biography Research Method
- Architecture in Social and Cultural Domain of a Russian City
- Analysis of Security Issues

- Teaching;
- Research and development;
- Expert and analytical activity;
- Cultural and educational activities;
- Organizational and management activities.

#### Studies of the European Union (Master of History)

http://tssw.ru/page/studies-ofthe-european-union-master-ofhistory/

The Master programme Studies of the European Union aims at preparing highly qualified professionals in the field of European integration and the policy of the leading European countries. The programme was designed in cooperation with the Institute of **European Studies of Brussels** Université libre. The programme was internationally certified in January 2015. The offered studies concentrate on development of students' skills in applied analytic work in the area of international politics and in managerial decision making and conducting research on EU-related problems.

# The main courses include three main blocks:

- 1. Core courses on the theory and practices of contemporary international relations:
- Megatrends and global problems
- Regional subsystems if international relations the 21st century
- Modern Russian foreign policy and international conflict
- Global security
- International situations analysis
- Foreign politics process and Russian foreign politics
- 2. Foreign languages studies: intensive courses on two European languages (first year of studies)
- 3. In-depth courses on the basics of European integration and key issues of European integration and the policies of the leading EU countries.

- Teaching;
- Research and development;
- Expert and analytical activity;
- Cultural and educational activities;
- Organizational and management activities.