

**KNRTU-KAI, Kazan, Russia**  
**DESCRIPTION OF THE PROMENG Curricula/Module**

TITLE OF THE MODULE	Code
Quality of management and ISO certification	<b>M.2.B.O.I.3</b>

Teacher(s)	Department
<b>Coordinating:</b> Dr. Denis A. Vedenkin <b>Others:</b> -	Radioelectronic and telecommunication systems

Study cycle	Level of the module	Type of the module
Master	First Semester	Optional

Form of delivery	Duration	Langage(s)
Лекции и семинары	18 weeks	Russian

Prerequisites	
<b>Prerequisites:</b> Not	<b>Co-requisites (if necessary):</b> Not

Credits of the module	Total student workload	Contact hours	Individual work hours
4	144	24	120

**Aim of the module (course unit): competences foreseen by the study programme**

The goal of the course is to provide the student the concepts of quality and quality management system, the process approach, implementation and evaluation of efficiency

Learning outcomes of module (course unit)	Teaching/learning methods	Assessment methods
Understanding the versatility of the concept of "quality of." The relationship of the concept of quality pre-delivered products and services to the competitiveness of the market	Lecture, discussion	Analysis of the situation with one of the types of products on the market valuation of its properties in comparison with the analogs
Analysis of the principles of a systematic approach to the quality management, familiarity with the requirements of the regulations and the fulfillment of their requirements in practice	Lecture, discussion, case technology	Develop requirements for the creation of one of the of proposed goods or services in accordance with the requirements of ISO
Determination of the economic and environmental impact of various factors in the analysis of the life cycle of goods and services	Case technology debate.	Interpretation of the results, the use of modern visual media, structuring information

Themes	Contact work hours							Time and tasks for individual work	
	Lectures	Consultations	Seminars	Practical work	Laboratory work	Placements	Total contact work	Individual work	Tasks
The concept of "quality". The concept of quality and competitiveness.	2		2				4		
Quality and competitiveness as the control object	2		2				4	14	Choosing wonder-present goods or services, to develop criteria for evaluation of the quality and competitiveness
The systems approach to the management of product quality	2		2				4	18	An analysis of the possibilities for improving the selected goods or services through the implementation of a systematic approach

Regulatory support quality management	2		2				4	18	Verify compliance with the requirements of the rules and regulations in the analysis improvements
Economic assessment and computer modeling of quality control problems	2		2				4	22	Carrying economic evaluation of the proposed ways to improve the quality of the commodity
Environmental management, based on ISO 14000	2		2				4	12	Analysis of the impact of quality management methods conducted on the ecology and the environment.
<b>Iš viso</b>	<b>12</b>		<b>12</b>				<b>24</b>	<b>84</b>	

Assessment strategy	Weight in %	Deadlines	Assessment criteria
Presentation of analysis and comparison of the competitiveness of one of the types of goods or services compared to analogs, depending on the "quality"	25	7 week	The number of selected criteria, the number of selected analogs, completeness study of qualitative parameters of the goods / services
Presentation of the methods developed a systematic approach to quality management for selected goods or services	25	12 week	The number of selected criteria of the model system approach, the completeness of study, the relationship with analogs
Presentation of the model the life cycle of a product or service, the evaluation of its economic and environmental impacts. Discussion of the project	50	18 week	Presentation skills, quality of presentation, depth study of the life cycle model, the number and quality of the proposed assessments

Author	Year of issue	Title	No of periodical or volume	Place of printing. Printing house or intranet link
<b>Compulsory literature</b>				
Кунтулова М.Г.	2008	Системы менеджмента качества – единый систематизированный процесс	16	Читальные залы 1, 2, 3, 5, 7 учебных зданий КНИТУ-КАИ
Гумеров А.Ф., Схиртладзе А.Г., Гречишников В.А.	2011	Управление качеством в машиностроении	20	Читальные залы 1-го учебного здания КНИТУ-КАИ
Ефимов В.В.	2010	Улучшение качества продукции, процессов, ресурсов	5	Читальные залы 3, 7 учебных зданий КНИТУ-КАИ
<b>Additional literature</b>				
Маслов Д.В.	2008	От качества к совершенству. Полезная модель EFQM		РИА «Стандарты и качество»
Тимофеева С.С.	2004	Экологический менеджмент	22	Ростов н/Дону изд. Феникс
Свиткин М.З.	1999	Менеджмент качества и обеспечение качества продукции на основе международных стандартов ИСО		