

## **COURSE: ELECTRIC POWER INDUSTRY AND POWER ENGINEERING**

The Program was initiated by Corr. Member of RAS, N.I. Voropai, Corr. Member of RAS, V.A. Stennikov and by research workers of the L.A. Melentiev Energy Systems Institute, Siberian Branch of the Russian Academy of Sciences (ISEM SB of RAS) for training the magistrates for further research and engineering activity related to creation, development and control of intelligent electric power systems and actively adaptive networks. Objective of the Program is to train professionals capable to provide transition from conventional electric power systems to intelligent electric power systems. Training the magistrates is the second step in joint training of research and pedagogical professionals of IRNITU and ISEM SB of RAS: a bachelor; magistrand; tutor-researcher; Candidate of Technical Sciences, Docent; Doctor of Technical Sciences, Professor; Academician of RAS.

Master Program was developed with participation of leading researchers of ISEM SB of RAS that have great experience in research, pedagogical and practical work. The Program includes conventional author's courses. The Program is implemented at the basic Chair of Electric Power Systems at ISEM SB of RAS and is supported by aggregation of technical, training and methodological equipment available in IRNITU and ISEM SB of RAS. Students of the Chair have an access to sci-tech library of ISEM SB of RAS possessing more than 75 thousand books, and to librarian systems of digital publishing houses: IEEE Xplore, Wiley, Elsevier, Springer and to unique computer and laboratory complexes of ISEM SB of RAS.

The main specialized disciplines are author's courses of the Program: Distributed Generation; Intelligent Electric Power Systems and Networks; Information Support of Monitoring and Control of Electric Power Systems; World Energy; New Methods for Analysis of Electric Power Systems Regimes; Market Relations in the Present-Day Electric Power Industry; Present-Day Means for Electric Power Systems Control; Information and Cyber Security in Energy.

Chief and leading researchers of ISEM SB of RAS take part in the Program implementation: Palamarchuk S.I., Doctor of Technical Sciences, Chief Research Worker, Head of Laboratory of Reforms in Electric Power Industry; Podkovalnikov S.V., Doctor of Technical Sciences, Chief Research Worker, Head of Department of Electric Power Systems; Golub I.I., Doctor of Technical Sciences, Professor, Leading Research Worker, Head of the Chair of Electric Power Systems; Kolosok I.N., Doctor of Technical Sciences, Leading Research Worker. Head of the Program: Fedchishin V.V., Director of the Energy Institute of IRNITU, Corresponding Member of the Quality Problems Academy.