GNSS education courses held by leading Russian corporations and universities in 2017

Viktor SAVINYKH, Andrey KUPIRYANOV - Moscow State University Geodesy and Cartography, GLONASS/GNSS Association Forum;
Pavel KAZAKOV - Russian Space Systems Corporation;
Anatoly ZEYLIGER – Moscow Timiryazev Agricultural Academy
RUSSIAN FEDERATION

ICG-12
1-7 December 2017
Training in Russian Space Systems

* Cooperation with leading universities: target training

* Basic subfaculties

* Postgraduate study

* Involving young people in programs, grants, schools, workshops
Russian Space Systems profile faculties

Aerospace and geographic information systems and information technology; Electronic-computing devices and informatics

Information technology rocket telemetry

Physical and mathematical methods of designing complex technical systems of space technologies

Space industry

Space and aviation industry
International School on Satellite Navigation

September, 2017

56 hours (6 days)

www.gnss-school.com
International School on Satellite Navigation

GNSS architecture, development, compatibility trends
International School on Satellite Navigation

GNSS Navigation signals
International School on Satellite Navigation

User equipment accuracy characteristics
International School on Satellite Navigation

The integrated use of GNSS and Remote Sensing data
International School on Satellite Navigation
Metrology, cartography
Russian Space Systems: other educational activities

Workshop “Use of Remote Sensing data” (November 2017)

GNSS course for Moscow State University Gymnasium students (December 2017 – February 2018, planned)
MIIGAiK special GNSS courses

• Base course: Global Navigation Satellite Systems
• Space Geodesy
• Space Navigation
• Orbital Methods
• GNSS applied geodesy, reference networks applications for monitoring of global, regional and local geodynamic, etc., etc
• Survey technologies, methods and equipment on base of GNSS signals
• Monitoring of Constructions
Post-graduate education, Graduate school (including GNSS applications)

- Geodesy
- Cartography
- Land management, cadastre and land monitoring
- Aerospace research of Earth, photogrammetry
- Geoinformatics
- Optical and optoelectronic equipment and systems
- Geoecology
- Economy and management of nation’s economy (in sectors including economy, development and management of enterprises, industry branches, complexes)
Precision positioning as new level of mass GNSS service
The Fundamentals of GNSS/GLONASS Applications in Railroad and VTS

- The Course Purpose is to give general knowledge on the GNSS application to railway and motor transports.
- Practical application knowledge of satellite systems to transport.
- To acquaint students with approaches and technologies of application of satellite navigation to railway and motor transports.

After studying the course the students should get general ideas of the state-of-the-art situation and main directions of application of satellite navigation systems to various kinds of transport.
Students get practical knowledge in technical design, optimization of network structure, equipment and software of GNSS used in state reference networks.
The training course: GLONASS-GNSS applications in earthquake regions

Students get basic skills in modern methods for observing the motions and strains of the Earth’s surface in seism active regions with the use of GNSS
The training course: GNSS applications in constructions deformation monitoring

Students get skills in equipment operation, software, technologies of monitoring of different types of engineering constructions with GNSS technologies.
Field survey management and planning of Cadaster with GLONASS-GNSS
GLONASS/GPS Oil & Gas Pipeline Monitoring
UniStrong equipment in studies (Applies Geodesy, 17.11.2017)
MIIGAIK students and post-graduate practice
Moscow Timiryazev Agricultural Academy Training Courses and Software Tools

- ERDAS-Imagine
- ArcGIS
- HEC-RAS
- SWAP
- MIKE 11
Moscow Timiryazev Agricultural Academy Electronic Training Courses
Web Hydro-Engineering

On-line communications of the participants

Server
Data bank  Software  work space

Delft
Stuttgart  Berlin  Moscow

Connection to server
Conclusion

Joint Stock Company "Russian Space Systems“, cooperated with set of leading Russian technical universities, such as Moscow State University of Geodesy and Cartography and Moscow Timiryazev Agricultural Academy perform different modern training courses on GLONASS-GNSS technologies.

Universities, training and information centers are always welcomed for cooperation!
Thanks for your attention!

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