



**CELLULAR  
EXPERT**

# Teaching telecommunications using GIS

Cellular Expert - original, spatial oriented, innovative network planning, optimization and data management solution

Cellular Expert team has designed special program for education institutions. With this program students get practical skills, competencies and core technical abilities required to be successful as a professional.

## What includes Cellular Expert education program?

- Educational software based on ESRI ArcGIS for wireless telecommunication network planning, optimization and data management – Cellular Expert LabKit and Cellular Expert LabKit Pack
- The set of prepared laboratory exercises
- Professional support
- Consultations and trainings

In addition Universities get help and our expert assistance to prepare Curriculum material, Lesson plans, Thesis topics - anything needed by an educator to manage their academic program.

## How education institutions benefit from the program?

- Supply Study Programs that are in great request - to meet the demands of the 21st-century workforce
- Use versatile and precise software for research and development - students and faculty can integrate and evaluate data from many sources to develop new theories and knowledge
- Study program based on modern GIS technologies prepares students for valued careers - whether they are involved in science, government or business
- Establish Contemporary R&D laboratories

If you are interested in learning more about the Cellular Expert educational program, please contact us [info@cellular-expert.com](mailto:info@cellular-expert.com)

## Examples of Telco laboratory exercises

- Integration of Cellular Expert with Matlab and use for wireless network modeling
- Analysis of mesh networks, coverage and interference prediction
- Comparative analysis of LTE and WiMAX network coverage and capacity
- Analysis of 4G networks backhaul options
- Cost/performance analysis of 3G and 4G networks voice and data services
- Users number influence (increase/decrease) on network capacity and coverage
- MIMO antennas and adaptive modulation influence on network capacity and coverage
- Prediction models types and different model parameters influence on coverage
- Traffic spreading and estimation
- Network optimization