

Tárgy neve: Terminology of Cartography and GIS

Tárgyfelelős neve: Dr. Pál Márton

Tárgyfelelős tudományos fokozata: habil. PhD

Tárgyfelelős MAB szerinti akkreditációs státusza: AT

Purpose of education:

a) knowledge

- Comprehensive knowledge of the principles, methods and procedures for the design, development and operation of geoinformatics, in particular in the following areas: operating systems and database management, design and development of web-based geoinformatics tools and services, geoinformatics-related programming principles, geospatial application development.

- Knowledge of the specific tools of the field of cartography and geoinformatics, the mathematical and cartographic principles of editing maps for different purposes, the ability to apply survey procedures, representational solutions and various reproduction technologies.

- Ability to create maps and geoinformatics systems that can be used by economic sectors or clients in the desired field.

b) abilities

- Ability to interpret and formalise complex professional problems in the field of cartography and geoinformatics, to identify the necessary theoretical and practical background and to solve the problem. Ability to provide consultancy, problem-solving, design, development, operation and management of cartographic and geoinformatics systems, decision support systems and expert systems.

- Ability to interpret, plan, organise, manage and control processes in the field of cartography and geoinformatics.

- Ability to communicate, debate and report in written and oral form in the mother tongue and in at least one world language, using a high level of professional vocabulary in the field of competence.

c) attitude

- It monitors professional and technological developments in the field of cartography and geoinformatics and the opportunities that will enable it to work in the public sector, in various companies or to set up and run its own business.

- Shares his/her own knowledge and values the dissemination of professional results in cartography and geoinformatics.

- It is committed to meeting and enforcing quality standards (accuracy, commitment).

d) autonomy and responsibility

- Able to work independently in IT, carrying out tasks, thinking through and developing technical issues in a self-directed manner and at a pace.

- Responsible for meeting and enforcing deadlines. Assumes responsibility for his/her own work and that of his/her colleagues working under his/her direction and with him/her (in a project).

- In the case of mission-critical mapping and geoinformatics systems, may be given development and operational responsibility appropriate with his/her professional competences.

Content of education:

Following themes will be presented in lecture form or discussed in the group:

1. Developing the vocabulary of earth sciences (geology, meteorology)
2. Developing the vocabulary of related disciplines (astronomy, geography, history)
3. Developing the vocabulary of classical cartography (surveying, map projections)
4. Developing the vocabulary of geoinformatics (GIS, GPS, remote sensing)
5. Use of internet sources, technical dictionaries, glossaries, translation guides

Materials will be sent to the group a week ahead, which help the students prepare for the class. About half of the course will cover the above topics, while the other half will be flexibly adjusted to the interest of the students. Developing the language skills is also aimed. Presenting research interest by ppt will help students improve presentation techniques. Recommended homework will often be given.

Evaluation system: practical mark based on course work

Literature:

Obligatory:

- Basic Cartography 1–2. International Cartographic Association, 1984
- Science in the News. Voice of America, 1989

Recommended:

- H. Dreyfuss: Symbol Sourcebook. McGraw Hill, London, 1972