



Co-funded by the
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ISM3. Artificial Intelligence, eHealth & Big Data & Technology in PHC— 5 ECTS

Module description & aims

Addresses AI and big-data-driven approaches to healthcare, including imaging, data analytics, decision support and privacy/security. Emphasizes practical tools tailored to PHC & eHealth problems with attention to governance and ethics.

Indicative content

- Data analysis and visualization; image quality; colour imaging basics
- Static graphical models (Bayesian networks, regression, factor analysis, decision theory, Gaussian mixtures)
- Intro to AI tools for prediction and decision support; contraindications and safeguards
- End-to-end data flows: acquisition, storage, processing, presentation in clinical context

Expected learning outcomes

Upon completion, participants can:

- Describe medical data lifecycles and registration approaches
- Select appropriate analytical or imaging methods for clinical questions
- Explain opportunities/risks of AI and big data in PHC, including privacy and security
- Communicate insights from analytics using clear visualizations

Teaching & assessment

Short quiz

tool demonstration or mini-project

participation in case discussions

interdisciplinary team training, etc