Medical Information Systems

Lecturer
David WIKLER (Coordinator)

Course mnemonic
INFO-H400

ECTS credits
5 credits

Language(s) of instruction
English

Course period
Second term

Course content

Electronic Medical Record (EMR), Communication and Interoperability standards (HL7, DICOM, IHE), Medical Terms, Security, Medical Databases, Applications Programming Concepts

Objectives (and/or specific learning outcomes)

Understand Medical Informatics Specificity, Integrate knowledge of the Electronic Medical Record, Explore state-of-the-art tools for Medical for Programming of Clinical, Education and Research Medical Applications

Teaching method and learning activities

Flexible and Interactive Lectures, Programming Exercises

Contribution to the teaching profile

This teaching unit contributes to the following competences:

- Gérer, explorer et analyser les données médicales (dossier médical, imagerie, génomique, statistiques)
- Intégrer les aspects normatifs (certifications), éthiques et légaux liés aux dispositifs et pratiques biomédicaux, analyser les aspects liés à la sécurité (dont la radioprotection) et mettre en place les processus de qualité
- Communiquer efficacement, tant de manière écrite qu'orale, avec des collègues ingénieurs, mais aussi avec les autres acteurs du domaine biomédical, s'intégrer dans une équipe pluridisciplinaire

References, bibliography and recommended reading

Edward H. Shortliffe, James J. Cimino, Biomedical Informatics: Computer Applications in Health Care and Biomedicine, 3rd Ed, Springer, 2006

Other information

Contact(s)

Université Libre de Bruxelles (U.L.B) Faculté des Sciences Appliquées Service LIST (LISA) - CP 165/57 Laboratoire de l'Image : Synthèse et Analyse Av. F.D.Roosevelt, 50 B-1050 Bruxelles Email: David.Wikler@ulb.ac.be

Evaluation method(s)

Other

Evaluation method(s) (additional information)

Individual Exercises Written Reports, Oral Questioning Exam

Programmes

Programmes proposing this course at the Brussels School of Engineering

MA-IRCB | Master of science in Biomedical Engineering | finalité Professional/unit 1

Programmes proposing this course at the faculty of Sciences

MA-BINF | Master in Bio-informatics and Modelling | finalité Research/unit 2