

## Skill Set

## Essential Learning Blocks

|  |  |
|--|--|
| <b>1. PERFORM A FUNCTIONAL AND TECHNICAL ANALYSIS TO DESCRIBE TECHNOLOGICAL SOLUTIONS FOR HEALTHCARE PROFESSIONALS</b> | <ul style="list-style-type: none"> <li>• Proactively engage with healthcare professionals (COM)</li> <li>• Take into account norms, standards and the regulatory environment (REG)</li> <li>• Produce structured documentation identifying needs (MET)</li> <li>• Consider specific practices and workflows of healthcare professionals (RES)</li> </ul>   |
| <b>2. WRITE FUNCTIONAL AND TECHNICAL SPECIFICATIONS FOR HEALTH INFORMATION SYSTEMS OR DIGITAL MEDICAL DEVICES</b>      | <ul style="list-style-type: none"> <li>• Meet functional requirements of healthcare professionals (RES)</li> <li>• Respect technical constraints in choosing or developing technological solutions (RES)</li> <li>• Comply with regulatory standards (certification, interoperability, security, CSR) (REG)</li> <li>• Implement a formal specification formalism (MET)</li> <li>• Structure documents and presentations to support effective communication with engineering and implementation teams (COM)</li> </ul> |
| <b>3. DESIGN AND DEVELOP HEALTH INFORMATION SYSTEMS</b>  | <ul style="list-style-type: none"> <li>• Ensure that technical solutions are complete and meet identified needs (RES)</li> <li>• Optimize usability, performance, and stability of technical solutions (RES)</li> <li>• Justify the methodological choices implemented (MET)</li> <li>• Produce appropriate documentation for the solution delivered (COM)</li> <li>• Demonstrate execution of validation tests (MET+RES)</li> </ul>   |
| <b>4. DESIGN AND DEVELOP DIGITAL MEDICAL DEVICES</b>   | <ul style="list-style-type: none"> <li>• Use biomedical data processing methods that address identified needs (MET)</li> <li>• Optimize solution performance based on specifications (RES)</li> <li>• Follow quality-assurance processes and applicable regulations (REG)</li> <li>• Integrate validation processes throughout development (MET+REG+RES)</li> <li>• Produce appropriate documentation for the solution delivered (COM)</li> </ul>  |
| <b>5. ADVISE HEALTHCARE PROFESSIONALS ON THE IMPLEMENTATION OF HEALTH INFORMATION TECHNOLOGY</b>                       | <ul style="list-style-type: none"> <li>• Identify and integrate relevant standards and regulations (REG)</li> <li>• Incorporate all elements necessary to meet the expectations of healthcare professionals (RES)</li> <li>• Ensure functional alignment between the technological solution and user needs (RES)</li> <li>• Develop clear written and oral communication materials for all project stakeholders (COM)</li> </ul>   |