

**Course title: PROCESS ORIENTED APPLICATIONS**

<b>Lecturers</b>	Assoc. Prof. Katarina Tomičić-Pupek, Ph. D. Full Prof. Neven Vrčec, Ph.D.
<b>Language of instruction</b>	Croatian and English
<b>Study level</b>	Bachelor
<b>Study programme</b>	Information and Business Systems
<b>Semester</b>	5 <sup>th</sup> (winter)
<b>ECTS</b>	4
<b>Goal</b>	New digital technologies are shaping information systems development paradigms. Creative business models based on effective and efficient business processes supported by modern technologies are essence of new enterprise architectures and key for competitive advantage of modern organizations. The objective of this course is to teach students theoretical foundations and tools for modelling and development of enterprise architectures. After finishing this course students should have detailed knowledge to generate applications based on business process models.
<b>General and specific learning outcomes</b>	
<b>Content</b>	Lectures: <ol style="list-style-type: none"><li>1. Process foundations of enterprise architectures</li><li>2. Technical concepts of service-oriented architectures</li><li>3. Technology foundations of service-oriented architectures</li><li>4. SOA data modelling</li><li>5. User interface modelling for data entry and data analysis</li><li>6. Business process logic</li><li>7. Roles and authorizations</li><li>8. Process application integration</li><li>9. Application execution</li><li>10. Business process analytics</li></ol>
<b>Exercises</b>	Practical work:  Work in professional software development environment. Development of software prototype – generation from business process model. Presentation of project results. <ol style="list-style-type: none"><li>1. Develop business process model as a foundation for generation of process-oriented application.</li><li>2. Describe business process architecture of business system.</li><li>3. Describe determinants that influence collaboration capacities of business system.</li><li>4. Elaborate data model for process-oriented architecture.</li><li>5. Develop process architecture in chosen software development environment.</li></ol>
<b>Realization and examination</b>	Lectures and seminars with partial e-learning activities. Independent assignments for students.  Projects and written/oral exam.
<b>Related courses</b>	
<b>Literature</b>	e-learning materials available at <a href="http://elf.foi.hr">elf.foi.hr</a>