

CROZ COURSE CATALOGUE 2022.

Aware of the importance of rapid acquisition of knowledge and constant change in the IT world, we pay special attention to education. Working on development projects for many years, we have noticed that the ability to quickly acquire new knowledge and continuous education are very important factors for the success of a company. To assist our clients in raising their level of knowledge and facilitating the monitoring of technological change, we have launched a full range of our own educational services - from pre-prepared catalog courses, through custom workshops to consulting on real projects. We are extremely proud that our consultants and instructors are continuously involved in development projects and acquire new knowledge and experience which they then convey through courses or consultations.

The catalog contains a series of courses related to technologies and methodologies developed by our experts. In addition to CROZ courses, we also deliver certified agile courses by agile42 and ISTQB training and certification.

More information on current courses is available on our website: <https://croz.net/education/>.

Courses can be held at the CROZ Education Center or at your location. Courses are held upon request and in agreement with the individual user (term and location). The content of the courses can be adapted to customer's needs.

Commitment of our instructors and consultants is best evidenced by the high grades they earn at the end of the course.

Let's learn together!

Your CROZ education center

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CROZ COURSES

	Course name	Code	Duration (days)
Basic development education			
1	<p>OBJECT ORIENTED PROGRAMMING AND JAVA PROGRAMMING – PART 1</p> <p>The first part of the Object Oriented Programming and Java course covers:</p> <ul style="list-style-type: none"> • Java as a programming language, as a platform, and as an ecosystem of existing components • Basic building blocks of the Java programming language • Write, compile, and execute a simple Java program • Eclipse integrated development environment • Expressions, operations, and assignments • Program flow control • Conversions between data types • Access modifiers and other modifiers • Classes and objects, encapsulation • Immutable objects and Java Beans • Enums • Familiarity with the basic principles of object-oriented programming • Interfaces and implementations • Polymorphism, interface, and abstract class • Wrappers of primitive types • Autoboxing and unboxing • Java exception system • Object methods: toString, equals, hashCodeCollections of objects in Java • Generics in Java • Internal Classes, Anonymous Classes, and Closures • Tips for working in Eclipse • Good practices for working in Java 	CROZJava1	5

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	<p>Prerequisite: The course is designed for developers who already know the procedural paradigm in programming and have practical experience with at least one programming language.</p>		
2	<p>JAVA 2: BASIC SOFTWARE PACKAGES AND DEVELOPMENT TOOLS</p> <p>The course provides an overview of some of the basic packages and tools in Java's standard application development kit.</p> <p>The course provides an overview of some of the basic packages and tools in Java's standard application development kit (JDK), as well as those that are not part of the standard kit, but are used as good practice in all Java development projects.</p> <p>Who should attend:</p> <ul style="list-style-type: none"> – beginners in Java programming who have mastered the basics of the language itself – participants with more Java experience who need to fill in knowledge gaps or refresh it <p>Course content:</p> <ul style="list-style-type: none"> • Overview of Java's Ecosystem: Language, JVM, Libraries and Tools • Apache Maven build, project organization, dependency management • Types of testing, JUnit 5 • Mocking tools, Mockito • Logging packages, Log4J2 • New features of Java 8: lambda expressions, Optional • Working with time: java.util.Date and java.time API • Google Guava: preconditions, collections, caches • String utilities, regular expressions • Concurrent programming: thread safety, thread-safe wrappers, concurrent utilities • Streams and parallel streams 	CROZJAVA2	2

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3	<p>INTRODUCTION TO R PROGRAMMING LANGUAGE</p> <p>In course, participants learn about objects in R, defining and using variables and functions, basic data types, vectors and operations on vectors.</p> <p>R is a specific programming language designed for data processing, statistical computing and data visualization. Besides various statistical and visualization packages it includes machine learning and advanced data processing packages.</p> <p>The goal of this course is to give introduction to basic concepts of R programming language. Course is held entirely through interactive R notebooks that give course attendees unique hands on experience.</p> <p>In course, attendees learn about objects in R, defining and using variables and functions, basic data types, vectors and operations on vectors. R is famous for its visualization capabilities, especially using ggplot package which is learned in course. R is primarily designed as statistical language, therefore it has wide range of statistical and machine learning packages which are taught in course. Entire course lectures and exercises are done in RStudio, one of the most popular development environments for R.</p> <p>First day:</p> <ul style="list-style-type: none"> • R basics <ul style="list-style-type: none"> ○ Objects, variables ○ Functions ○ Data types ○ Vectors and arithmetic with vectors ○ Basic data wrangling ○ Programming in R basics • Data visualization <ul style="list-style-type: none"> ○ Introduction to data visualization ○ Data distribution, quantiles, boxplots ○ Plotting data with ggplot ○ Summarizing data with dplyr ○ Data visualization principles 	CROZR	2
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	<p>Second day:</p> <ul style="list-style-type: none"> • Data wrangling <ul style="list-style-type: none"> ○ Tidy data – cleaning and preparing data ○ String processing ○ Working with dates and times • Introduction to statistics <ul style="list-style-type: none"> ○ Basics of statistics, probability ○ Inference and modeling • Machine learning <ul style="list-style-type: none"> ○ Classification and regression ○ Model evaluation <p>Course is prepared for:</p> <ul style="list-style-type: none"> • Business analysts • Data scientists • Data analysts • Software engineers <p>Prerequisite: Knowledge of basic programming concepts such as variables, functions and loops is desirable</p>		
4	<p>SQL COURSE</p> <p>Short description of the course: The two – day course provides a theoretical and practical overview of database introduction and simple SQL queries.</p> <p>The SQL course introduces students to database usage, integral components of modern applications. It consists of 8 units and begins with an introduction to databases and defining basic terms and types of data. The course includes the basic SQL clauses SELECT, FROM, WHERE, GROUP BY, HAVING and ORDER BY. Participants are introduced to the basic scalar and aggregate functions and how to apply them in everyday work. The second day of the seminar discusses the ways of grouping data and mandatory rules to create a union of SQL results.</p> <p>Through the course, participants will learn to use subqueries, the last lesson contains basic commands for editing data such as INSERT, UPDATE and DELETE.</p> <p>PowerPoint presentations are used for each lesson, and it is especially useful that after each lesson, except introductory one, exercises are done in a pre-prepared environment.</p>	CROZSQL	2

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	<p>Through the exercises, the understanding of the presented material is checked, and the presence of an instructor facilitates the solution and correction of mistakes.</p> <p>Content: The content of the course can be adapted to users with different prior knowledge. Each unit contains exercises, and exercises also “for those who want to know more.”</p> <p>First day:</p> <ul style="list-style-type: none"> • Introduction • Simple SQL queries • Exercise 1. • Retrieving data from multiple tables • Exercise 2. • Scalar and arithmetic functions • Exercise 3. <p>Second day:</p> <ul style="list-style-type: none"> • Aggregate functions and grouping • Exercise 4. • Union • Exercise 5. • Subqueries • Exercise 6. • Data editing • Exercise 7. 		
5	<p>JAVASCRIPT AND JQUERY BASICS</p> <p>You will be introduced to the basics and more advanced techniques of using the tool, and finally with jQuery UI, a tool we use when we need ready UI solutions, such as calendars, tooltips, etc.</p> <p>The first course program focuses on the JavaScript programming language, outlining the basics of programming in JavaScript: the grammar; working with data structures; prototype-based, objective-oriented aspects of JavaScript; functions and functional programming; processing exceptions; applying regular expressions; features of a good programming style; code unit testing and parts to avoid.</p> <p>The program is closely based on “JavaScript: The Good Parts” by Douglas Crockford.</p> <p>The second part of the program is based on the most popular JavaScript tool of today – jQuery. You will be introduced to the basics and more advanced techniques of using the tool, and finally with jQuery UI, a tool we use when we need ready UI solutions, such as calendars, tooltips, etc.</p>	CROZJSJQ	5

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Advanced development education

6	<p>SPRING FRAMEWORK COURSE</p> <p>Course description</p> <p>Spring Framework is a set of libraries which significantly simplifies the development of the application in Java as standard or enterprise applications.</p> <p>This course gives a complete overview of the Spring Framework covering beginner to advanced topics.</p> <p>Prerequisites: Course requires active knowledge of application development in Java and basic knowledge of web application development.</p> <p>Audience: Software engineers working in Java application development.</p> <p>Basics of Spring</p> <ul style="list-style-type: none"> • The role, philosophy, and brief history of Spring • Modular applications: components and wiring • Dependency injection and Inversion of Control: concepts • Examples of dependency injection into a service without a development framework • Inversion of Control container in Spring • Definition of Spring application context in XML • Spring properties, configuration and use • Profiles in Spring • Component life cycle in Spring • Explicit Spring configuration in Java • Self-wiring in Spring • Fundamentals of aspect – oriented programming (AOP) in Spring • AOP on the example of transaction management <p>Spring Boot and REST service development</p> <ul style="list-style-type: none"> • Spring Boot development concept • Create a Spring Boot project from Spring Initializr • HTTP protocol and basics of REST style of Web service development 	CROZSF	5
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<ul style="list-style-type: none"> • Creating a Spring controller for REST services • CRUD functionality with Web services • JSON serialization with Jackson • Using Postman in the development of REST services • Development of a Java client for the REST service in Spring • JavaScript client for REST services using Fetch API (optional) <p>Server-side templating in Spring</p> <ul style="list-style-type: none"> • Web MVC framework in Spring • Thymeleaf templating format • Using Thymeleaf in the Spring Boot app • User interface development in HTML using MVC model with server-side templating • Externalization of messages in the application through resource bundles • Binding and validation of input data • Multilingual validation messages • Ensuring access to the site in Spring: the administration page and the "admin" user <p>Three-tier application in Spring</p> <ul style="list-style-type: none"> • Three-tier Web application architecture • Spring Data Basics • Using the JDBC template method • Using Object-Relational Mapping (ORM) with JPA and Hibernate • Databases in memory, H2 and its admin console • JpaRepository interface in Spring and naming methods • Setting object-relational mapping through annotations • Mapping exceptions to response statuses in REST • Exception handling through ControllerAdvice processing for REST controllers • Data transfer facilities • JPQL queries in Spring Days <p>Spring Security</p> <ul style="list-style-type: none"> • Adding Spring Security to the Boot application • Authentication for the Spring Boot application with built-in users • Using UserDetailsService 		
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	<ul style="list-style-type: none"> • Encryption using a password encoder • Authorization through method annotations • User authentication via data recorded in the database • Identifying the logged-in user and using access data in the services 		
7	<p>ADVANCED SQL COURSE</p> <p>Education description:</p> <p>Advanced SQL course teaches how to use advanced SQL techniques to access a database. This seminar is intended for students who have a basic knowledge of SQL or have completed a basic SQL course.</p> <p>Who should attend: Developers, database administrators, business analysts and others who often use SQL in their job descriptions will benefit the most from the seminar.</p> <p>The course consists of 8 units and begins with an overview of the basic clauses in SQL and the use of OLAP functions that are useful in the Data Warehouse environment.</p> <p>First day:</p> <ul style="list-style-type: none"> • Overview of the basics of SQL and OLAP functions • Exercise 1. • Creating objects • Exercise 2. • Join tables • Exercise 3. • CASE, CAST, summary (MQT) and provisional tables • Exercise 4 <p>Second day:</p> <ul style="list-style-type: none"> • Complex supports • Exercise 5. • Scalar functions • Exercise 6. • Tabular expressions and recursive SQL • Exercise 7. • UDT, UDF and performance • Exercise 8. 	CROZSQL2	2

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	PowerPoint presentations are used for each lesson, a whiteboard and / or flipchart are used for additional explanations, and it is useful to do exercises in a pre-prepared environment after each lesson.		
8	<p>PL/SQL WORKSHOP</p> <p>This course gives an introduction in PL/SQL, an overview of database objects and types and details about programming tools.</p> <p>Content:</p> <p>Introduction</p> <ul style="list-style-type: none"> • A short introduction into SQL and PL/SQL <p>Database objects:</p> <ul style="list-style-type: none"> • A short overview of database objects (table, view, type, sequence, trigger, package, function, procedure, synonym) • An in-depth overview of objects (type) • Naming convention <p>Data types:</p> <ul style="list-style-type: none"> • Varchar2, number, date... • Records, Collections... • BLOB, XML, CLOB, LONG, RAW... • Naming conventions <p>Flow control (if, case)</p> <p>Interactive control (loop, for-loop, while)</p> <p>Cursors and cursor for-loops</p> <p>Transactions:</p> <ul style="list-style-type: none"> • DML into PL/SQL • Commit, rollback • Autonomous transactions <p>Exceptions & exception management</p> <ul style="list-style-type: none"> • Custom exceptions • Sqlcode, sqlerrm, dbms_utility.format_error... • Naming conventions 	CROZPLSQL	5

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	<p>Conditional compilation</p> <p>Triggers</p> <p>Procedures & functions</p> <p>Packages:</p> <ul style="list-style-type: none"> • Using variables • Declaration • Naming conventions <p>Dynamic SQL:</p> <ul style="list-style-type: none"> • DDL in PL/SQL • DML in dynamic SQL • SQL injection <p>Programming tools:</p> <ul style="list-style-type: none"> • SQLDeveloper • PLSQL Developer • TOAD 		
9	<p>WEB SERVICES - CONCEPTS, DEVELOPMENT, IMPLEMENTATION</p> <p>The aim of the course is to acquaint participants with the concept, implementation and integration of Web services into modern IT systems.</p> <p>Audience: Developers who would like to learn or expand their Web services knowledge.</p> <p>Prerequisites: The course contains detailed programming exercises, and is intended for engineers with experience in Java programming.</p> <p>Content:</p> <ul style="list-style-type: none"> • Introduction to service architecture and Web services • Types of Web services and architectural styles of WS- * and REST • Serialization of Java objects in XML format • Specifying data structure using XML schema definitions • SOAP standard and SOAP message structure • Web service description using WSDL 	CROZWS	2

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	<ul style="list-style-type: none"> • Contract-last SOAP Web service implementation • Creating client for the SOAP web service using Apache CXF • WebMVC Spring framework architecture for Web services • Creating a REST web service on the Spring framework • JSON format and serialization from Java • Writing a REST client for Web services in Java • Writing a REST client in JavaScript 		
10	<h3>INTEGRAL APPROACH TO SOFTWARE DEVELOPMENT</h3> <p>The workshop will provide the explanations for the concepts such as source code repository, issue tracker, snapshot and integration build, developmental, staging, test and production environment, build and test automation, as well as for the connections and interactions between them.</p> <p>Software development process is by far a wider concept than just programming. Diverse and apparently unconnected disciplines and activities arranged and used in the right way, facilitate the development process, assist in planning and in the end affect the successful outcome of the project itself.</p> <p>The workshop will provide the explanations for the concepts such as source code repository, issue tracker, snapshot and integration build, developmental, staging, test and production environment, build and test automation, as well as for the connections and interactions between them.</p>	CROZBRM	1
Mobile development			
11	<h3>ANDROID APPLICATION DEVELOPMENT</h3> <p>This course puts focus on Android API and its working environment.</p> <p>You will learn about:</p> <ul style="list-style-type: none"> • Android API, working environment • creating user interface, basic elements, lifecycle app, using bases and files, network communication • location services, maps, widget creation 	CROZRRA	3

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12	<p>DEVELOPMENT OF IOS APPLICATIONS: IPHONE & IPAD</p> <p>This course focuses on programming, architecture and advanced iOS concepts.</p> <p>It covers:</p> <ul style="list-style-type: none"> • ObjectiveC programming language, tools (XCode, Interface Builder, Instruments), application development cycle (developer license, development, testing, publishing) • Basic iOS application architecture, Cocoa Touch UI framework • Advanced concepts (multitasking, camera management, and multimedia) • Accessing the address book and phone book, XML, and connecting to business services) 	CROZIOS	3 OR 5
Alfresco			
13	<p>SOLUTIONS DEVELOPMENT ON ALFRESCO ECM SYSTEMS</p> <p>This five-day course provides an insight into the best development practices of the Alfresco ECM system.</p> <p>This course puts focus on:</p> <ul style="list-style-type: none"> • Development on Alfresco platforms • Alfresco web services layer • Alfresco workflow API • Activity BPM stack • Alfresco security model • Alfresco development best practices 	CROZAR	5
14	<p>ADMINISTRATION AND MANAGEMENT OF ALFRESCO SYSTEMS</p> <p>Short description of course content:</p> <ul style="list-style-type: none"> • Installation and maintenance of the Alfresco platform • support for end users of the system • Working with the Alfresco content store 	CROZAA	3

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	<ul style="list-style-type: none"> • Integration with Identity management systems LDAP and Active Directory configurations of Share client • CIFS / FTP / NFS interface configuration • integration into Windows security • integration with scanning subsystems, OCR subsystems 		
Methodologies			
15	<p>CERTIFIED SCRUM PRODUCT OWNER TRAINING</p> <p>Description</p> <p>Leading a successful Agile transformation requires new practices that help your organization best support your business goals, respond effectively to change, help leaders guide teams, make the right technology decisions and much more.</p> <p>This highly interactive introduction to the principles and practices of Agile/Scrum leads to the group creating a real product backlog. Starting by defining a product vision, the group works through each phase of the requirements definition process, creating each artifact in full, and learning how to evolve the agile requirements needed to iteratively and incrementally deliver the valuable products your customers need.</p> <p>Intended audience: Ideal for product owners, product managers, business analysts (BAs) and business stakeholders and representatives looking to apply the Agile/Scrum principles and practices.</p> <p>Learning Objectives:</p> <ul style="list-style-type: none"> • Understand the principles underlying agile methodologies and how to apply them in a team context • Gain a common vocabulary and understanding of the Scrum framework, including the roles and responsibilities of the ScrumMaster, Product Owner and Development Team and how to collaborate with them • Learn how to write effective user stories that meet the INVEST criteria, and practice breaking user stories into smaller stories using the nine patterns for splitting user stories • Create a viable project vision, release forecast and visualise progress for an agile project. Discover how documentation, 	CSPO	2

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	<p>governance and reporting differ between a PMI and an agile project</p> <ul style="list-style-type: none"> • Experience the product definition process, from visioning to user stories using such tools as Lean Product Canvas and User Story Mapping • Practice estimating value and using the Business Value Game for managing conflicting stakeholder priorities • Learn how to create a release forecast without defining each and every requirement at the outset. Understand agile product discovery and the power of iterative methods for risk management • Learn the characteristics of good, well-formed user stories and how to create them in a structured way • Learn through doing, building an actual product vision, release forecast and backlog from start to finish • Understand how to make progress visible and how to facilitate successful delivery of a project to fixed date and/or fixed time • Attending the entire course qualifies you to receive the Certified Scrum Product Owner certification. 		
16	<p>ADVANCED CERTIFIED PRODUCT OWNER (A-CSPO) TRAINING</p> <p>Overview: Our Advanced Certified Scrum Product Owner (A-CSPO) training class is a two-day learning experience for Certified Scrum Product Owners who already have at least one-year experience and want an advanced education to be able to juggle multiple business opportunities and learn how to communicate effectively across a range of stakeholders. The A-CSPO program is the second step in the Scrum Alliance Path to CSP program and it is designed to build on your previous knowledge and experience and further enhance your skills to improve your outreach and work with your development team(s) in the most effective way possible.</p> <p>The class is presented in a highly interactive and collaborative format with elements of lecture, classroom discussion, exercises, games and simulations, smoothly blended throughout the class.</p>	A-CSPO	2

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	<p>Upon completion of the class, students who have at least 1 year experience as a Product Owner will be eligible to become an Advanced Certified Scrum Product Owner (A-CSPO).</p> <p>Pre-requisites: In order to obtain the A-CSPO certification, you will need to attend the 3-day A-CSPO training, hold a Scrum Alliance CSPO certificate and demonstrate at least one-year work experience specific to the role of Product Owner (from within the past five years).</p> <p>Who should attend: The A-CSPO course is appropriate for Certified Scrum Product Owners with at least 1 year experience as a Product Owner. This is the perfect opportunity to further develop in the principles and practices of Agile Product Management, whilst taking the next step on your journey towards becoming a Certified Scrum Professional.</p> <p>Even though the course is appropriate for Certified Scrum Product Owners with at least 1 years' experience, you can still attend the class if you are short of your required experience. You will only receive certification after the full 1 year is completed.</p> <p>Training Topics:</p> <ul style="list-style-type: none"> • Deep dive in the role of the Product Owner • Different levels of Planning • Advanced Product Discovery • Design Thinking • Product Strategy and Release Strategy • Roadmapping of MVPs • Advanced Backlog Building • Engineering Practices and Release Costs • User Validation without Release • Scaling Scrum • Facilitating Stakeholder Conversations 		
17	<p>CERTIFIED SCRUM MASTER TRAINING</p> <p>Overview: Understanding the principles that form the foundation of Agile is at least as important as understanding the practices common to each agile framework, whether Scrum, Kanban or any other framework. The training blends an overview of key principles from Lean and Agile with an in-depth discussion of the four key practices necessary for Agile to work. After an introduction to Scrum, the most</p>	CSM	2

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<p>commonly applied agile framework with over 70% of agile projects reporting using Scrum in one form or another, we use a simulation - the Lego Scrum City simulation - to help participants immediately put theory into practice.</p> <p>The simulation provides vivid and memorable experiences that tightly mirror those that new teams experience when adopting Scrum in real life. Emerging the needs of an agile approach through actual experience is much more powerful than simply describing the process in detail. The simulation locks in the learning and drives a much deeper understanding of why critical agile practices exist. Teams that have experienced this simulation exercise repeatedly draw from their experiences here in the weeks and months that follow.</p> <p>Target audience: The course is designed for entire product/project delivery teams, not only Scrum Masters, as well as anyone likely to work with or on an agile team. It is ideal for teams or organizations new to Agile who need practical and memorable instruction.</p> <p>Learning Objectives</p> <ul style="list-style-type: none"> • Understand the principles underlying agile methodologies and how to apply them in a team context • Connect agile principles to the core lean disciplines and understand how to apply lean and agile principles to software/product development • Learn about the trends driving agile adoption and the benefits of an iterative and incremental approach • Gain a common vocabulary and understanding of the Scrum framework • Understand the roles and responsibilities of the Scrum Master, Product Owner and Development Team • Be able to effectively facilitate Scrum meetings: daily scrum (stand-up), sprint/iteration planning, review and retrospectives • Be able to apply the Agile & Scrum principles and practices to build a real product • Work together on an agile team, using the iterative process to rapidly learn and change how the team works • Attending the entire course qualifies you to receive the Certified Scrum Master certification (on successful passage of the Scrum Alliance CSM online exam). 		
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<p>18</p>	<p>ADVANCED CERTIFIED SCRUM MASTER (A-CSM) TRAINING</p> <p>Overview: Our Advanced Certified ScrumMaster (A-CSM) training class is a two-day learning experience for Certified ScrumMasters who already have at least one-year experience and need to take a further step in learning, scaling, facilitating and coaching, in order to become true experts. The A-CSM program is the second step in the Scrum Alliance Path to CSP program and it is designed to build on your previous knowledge and experience and further enhance your skills in the service of the Team, the Product Owner and the whole organization.</p> <p>The class is presented in a highly interactive and collaborative format with elements of lecture, classroom discussion, exercises, games and simulations, smoothly blended throughout the class.</p> <p>Upon completion of the class, students who have at least 1 year experience as a Scrum Master will be eligible to become an Advanced Certified ScrumMaster (A-CSM).</p> <p>Pre-requisites: In order to obtain the A-CSM certification, you will need to attend the 3-day A-CSM training, hold a Scrum Alliance CSM certificate and demonstrate at least one-year work experience specific to the role of ScrumMaster (from within the past five years).</p> <p>Target audience: The A-CSM course is appropriate for Certified ScrumMasters with at least 1 year experience as a Scrum Master. This is the perfect opportunity to further develop in the principles and practices of Scrum within an Agile team or organization, whilst taking the next step on your journey towards becoming a Certified Scrum Professional.</p> <p>Even though the course is appropriate for Certified ScrumMasters with at least 1 years' experience, you can still attend the class if you are short of your required experience. You will only receive certification after the full 1 year is completed.</p> <p>Included in the training:</p> <ul style="list-style-type: none"> • Eligibility to become an Advanced Certified ScrumMaster (A-CSM) • Certificate + two-years membership to the Scrum Alliance 	<p>A-CSM</p>	<p>2</p>
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	<ul style="list-style-type: none"> • Slack channel to continue collaborating with your classmates after the class and access to trainers to ask questions • A hard copy of “The Hitchhiker's Guide to Agile Coaching” book Option to join the agile42 Community and get access to a number of free learning resources, like books, articles and videos • Life-long warranty on the course: e-mail access to the trainers 		
19	<p>CERTIFIED SCRUM DEVELOPER (CSD) TRAINING</p> <p>Overview: agile42's highly interactive 16-hour Certified Scrum Developer class provides hands-on learning focused on the team members who will be building the product. In this class, students will learn techniques that help teams around the world build shippable increments of products in short timeframes.</p> <p>In addition to learning concepts and techniques, students apply this learning building usable products in three 1-hour sprints. The groups must create a usable product at the end of each sprint. This hyper-compressed timeframe requires that students use Agile development techniques and strip out unnecessary waste in order to deliver a quality product on time.</p> <p>This class can be tailored to fit most development environments and many non-software products as well. We also encourage anyone who helps build the product to attend. We regularly involve designers, testers, analysts and other individual contributors in-class exercises.</p> <p>Learning Objectives</p> <ul style="list-style-type: none"> • Lean, Agile, and Scrum Fundamentals • Definition of Done, a key practice in ensuring quality standards are met • Effective Team Dynamics, the difference between true teams and working groups and how to develop as a team • Emergent Architecture and Design, approaches that allow designs and architecture to emerge and change over time • Test-First Development, building quality into the development process rather than relying only on checking for errors later • Refactoring as a practice to continually increase quality and built-in maintainability 	CSD	2

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	<ul style="list-style-type: none"> • Continuous Integration and code ownership to detect integration errors as quickly as possible <p>Target audience: This training is designed to help anyone who has a hand in building the product. This includes Software Engineers, QA Engineers, DB Administrators, Designers, and others.</p> <p>We will cover technical topics, however, a coding background is not required for this class - just an openness to learning.</p> <p>Certifications: CSD® Certification (Scrum Alliance)</p> <p>The CSD® certificate is a prerequisite for the A-CSDSM (Advanced CSD) training</p>		
20	<h2>AGILE & SCRUM WORKSHOP</h2> <p>Description: Scrum framework is the most popular Agile approach to developing complex products and services, initially created for software development, it quickly became widely adopted by a range of industries outside software like marketing, hardware, finance, education etc. Scrum is based on highly flexible and adaptive, small autonomous and cross-functional teams who are focused on delivering value to customers and acquiring knowledge through fast feedback loops.</p> <p>Come to this course to learn about Agile mindset and culture, what it means to be agile, various elements that define the Scrum framework and their interactions, techniques, tools and practices to help you leverage the power of Scrum, become more agile and deliver better results to your customers. You will hear real-life stories, concrete examples and many other useful insights from our trainers with years of experience coaching individuals, teams and organizations.</p> <p>About the course: The course is delivered in a highly interactive and collaborative format with elements of lecture, group discussions and exercises, lots of interactions, experience and knowledge sharing with plenty of opportunities for your own questions and topics, all evenly balanced throughout the course. As the course is quite intensive and engaging, we will have enough breaks to ensure we stay focused and recharge when necessary.</p> <p>Our trainers don't use PowerPoint, instead they use flipcharts (physical or digital) to draw and visually facilitate the lecture and</p>	CROZSCRUM	2

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<p>conversations during the course. All the materials created during the course are provided to the participants together with many other handouts and links to resources like articles, books and videos to enable further learning after the course.</p> <p>For an online course we use Zoom for video conferencing and Miro for online collaboration so you need to have access to a computer, a stable internet connection, a microphone and a camera so we can interact, hear and see each other during the course. Zoom and Miro are free of charge for the participants and, although they can be used through the web interface, we highly recommend that you install desktop versions for better experience and use a headset for clearer audio.</p> <p>Who should attend? There are no prerequisites for attending this course. This course is designed for anyone who is interested in gaining deeper knowledge and understanding about Agile and Scrum, whether you participate in the development process (Scrum Masters, Product Owners, development team members, analysts, designers, programmers, testers, etc.) or you are part of the environment and interact with people who do (stakeholders, project managers, HR, organizational managers and leaders, etc.).</p> <p>Those who are at the beginning of their agile journey will get a solid foundation to build upon and learn how to start, while those with prior experience will get a chance to reflect on their own use and understanding of Agile and Scrum, gain additional tips and tricks, fill gaps and deepen their knowledge and understanding on how to help improve Scrum adoption in their teams and organizations.</p> <p>Why CROZ? If you are interested in Agile then you came to the right place and the right people. CROZ agile team is at the forefront of Agile understanding, adoption and development in Croatia and the region for years. Our skilled and experienced coaches and trainers, first Certified Scrum Professionals in Croatia, have since delivered 200+ trainings and courses, helped 20+ organizations and 100+ teams adopt Agile values and principles in practice through approaches like Scrum, Kanban, etc. Together with our partners from agile42, we continue to be the driving force of Agile adoption in the region, spreading awareness, knowledge and helping our clients become more agile.</p>		
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	<p>Course Topics</p> <p>Here are the main topics that are covered during the course:</p> <ul style="list-style-type: none"> • Foundations of Agile and Scrum • Empirical process control, complexity and dealing with uncertainty • Iterative and Incremental approach • Agile values and principles • Scrum Framework and Scrum Values • Scrum Events and Activities • Scrum Roles and responsibilities • Differences between Groups and Teams • Product Backlog and Product Backlog Items • Sprint Backlog • Product Increment and Definition of Done • Scrum Master Core Competencies • Servant Leadership, Agile Coaching and Facilitation 		
21	<p>AGILE AWARENESS</p> <p>This one day awareness course opens more questions than it answers, but that's the nature of agile mindset. We'll go through the basic ideas of agile and lean, and how to fit them into your daily work. We'll use metaphors and highly interactive activities to introduce the concepts, and to connect them to your workplace. Be ready to move some furniture around, play balls and work with your colleagues on various tasks. You'll even be assigned a homework! The course itself is an example of a product or service implemented in an agile way, so watch carefully how the coaches deliver the content to you.</p> <p>Objective: Participants understand the key principles in applying agile mindset in their own work, and the work of the people they are managing or working with.</p> <p>Target Audience</p> <ul style="list-style-type: none"> • Middle management • Team leaders • Anyone who interacts with agile teams 	CROZAAM	1

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	<p>Agenda:</p> <p>Understanding the crucial concepts in order to understand agile way of working:</p> <ul style="list-style-type: none"> • Process control • Iterations and Increments • Benefits of focused team work • Difference between traditional and modern, knowledge based types of work • Agile Myths and Facts <p>Agile principles in real world:</p> <ul style="list-style-type: none"> • Scrum • Kanban • Their applicability in various contexts • Where's Design Thinking in all this? • Agile Manifesto <p>How an agile organization works?</p> <ul style="list-style-type: none"> • Managing portfolio of products and services in an agile way. • Product/Service lifecycle explained, and where agile principles and frameworks fit in. <p>Various approaches to introducing agile way of working:</p> <ul style="list-style-type: none"> • Why focused, co-located teams are the best approach • How to deal with distributed teams • How to deal with Business as Usual (BAU) • How to deal with traditional (waterfall) planning <p>Applying the learnings in your daily work</p> <ul style="list-style-type: none"> • What of the learnings will you, The Attendee, apply in your daily works, starting tomorrow? 		
22	<p>BASIC PROJECT MANAGEMENT EDUCATION</p> <p>Introduction to Project Management</p> <p>The professional management of projects requires a disciplined approach to ensure that the agreed benefits will be realised and the role of the project manager is vital to achieve the success of a project. This 5-days course will introduce you to the principles, concepts and</p>	CROZPM1	3 OR 5

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<p>practices of the efficient project management in dynamic and changing project environments. Through practical exercises you will learn different methods, tools and techniques that will enable you to put project management principles to work at your own organizations regardless of the project approach. Whether the project life cycle is predictive or agile, you will be able to recognize and apply the optimal project management approach. You will also get important guidelines for further development of your PM skill set in order to stay competitive and relevant.</p> <p>Certificate of Completion will be provided which could be enclosed to the exam application of the Project Management Professional (PMP®) certificate. Please note that PMP® candidates will need additional resources to prepare for the exam.</p> <p>Intended audience: Project team members, Junior Project Managers, Project Sponsors, Product Owners, Junior-level Product Managers, Programmers, Designers, Testers, Software engineers, Executives, Business Owners, Business Analysts</p> <p>Agenda:</p> <ul style="list-style-type: none"> • Project Management Introduction, Project Fundamentals • Project Participants • The Process Groups • Project Initiation and Planning • Plan and Define Project Scope, Validate and Control Scope • Develop the Project Schedule, Control the Project Schedule • Creating a Project Budget • Planning and Risk Management • Integration management • Planning Quality Management, Manage and Control Quality • Plan and Acquire Resources, Develop and Manage Resources • Plan and Manage Communications • Planning Stakeholder Engagement, Stakeholder Management • Managing Project Work • Procurement management • Monitoring Performance • Transitioning or closing a project 		
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Business Analytics			
23	<p>DATA VISUALIZATION</p> <p>This course will focus on the application of data visualization, methods and best practices of data visualization. The course consists of presentation, demonstration and practical tasks for participants.</p> <p>The goal of this course is to educate participants about basic steps in data visualization. Because of the way how the human brain processes the information, the best impact and memorability of the information is achieved by using visual objects, instead of using exhausting reports, or extremely large tables.</p> <p>Data visualization means usage of visual objects, like tables and charts, so that they can carry out the messages to the final users in a simple, clear and correct shape. The course will cover application, methods and the best practices for data visualization.</p> <p>Recommended audience:</p> <ul style="list-style-type: none"> • IT managers • Directors • Analysts (both business and technical analysts) • Everyone whose job is to present data and is important to tell a story by using appropriate visualizations • Everyone who would like to introduce creativity in their work and at the same time improve the effectiveness of their reports, conclusions and messages <p>Goals of the course:</p> <ul style="list-style-type: none"> • To introduce the participants with the advantages of data visualization and how does the audience visually perceives the information • To introduce the participants with available tools/techniques for data visualization • To educate the participants how to emphasize the message by choosing the correct type of visualization for the specific type of data • To introduce the participants with the most common mistakes in the design of the visualizations and give 	CROZVP	1

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	<p>participants the guidelines for the design of more effective visualizations.</p> <p>Course description:</p> <p>The main parts of the course are:</p> <ul style="list-style-type: none"> • Introduction in the data visualization – what is data visualization; current status and challenges; visual perception of the information; business value of visualizations • Ways for data visualization – techniques and methods for data visualization; table and chart design • Application of data visualization – when is the best time to use the data visualization; steps in the process of the virtual design – how to find a story in the data • The best practices– how to use the visual language of the organization; most common mistakes and the best practices in visualization design • Tools for data visualization– the overview of the available tools for data visualization; workshop – making tables and charts by applying what was learned 		
24	<p>INTRODUCTION TO DATA LAKE ARCHITECTURE</p> <p>One of the essential elements of modern data (driven) architecture is Data Lake. Data Lake concept has the role of collecting all potential data in one place to support the implementation of Data-Driven services such as Self-Service BI, Predictive analytics, machine learning algorithms (AI), NLP services. The most crucial elements of data lake architecture are:</p> <ul style="list-style-type: none"> • Build Data Ingestion – the process of loading data in near real-time regardless of data usage • Access layer – design optimal access points for each consumer • Data Catalog – each data set needs to be appropriately categorized and enabled by Data Lineage using metadata management policies and standards • Data Privacy – design the process of managing principal approaches depending on purpose and need (GDPR) <p>It is crucial to implement all these elements simultaneously to create a coherent and sustainable architecture and avoid the unwanted</p>	CROZDLA	2

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<p>situation of creating an unusable and unmaintainable Data Swamp from Data Lake.</p> <p>This training is primarily intended for architects who have not used a Data Lake system so far or plan to use it. The underlying goal of the education relies on methodology and best practices to create a sustainable and extensible Data Lake architecture with Data Governance in mind.</p> <p>The course is divided into two modules (days), allowing you to choose modules you are more interested in – whether it’s an introduction to Data Lake architecture or deep dive into sustainability and data governance. Every module is accompanied by examples and exercises based on real-life scenarios.</p> <p>Day/module 1 – Introductions to Data Lake</p> <ul style="list-style-type: none"> • Why Data Lake? • Data Lake architectures • Deep dive to the Data Ingestion process (patterns for batch and real-time) • How to build an optimal access layer? <p>Day/Module 2 – Data Lake sustainability</p> <ul style="list-style-type: none"> • Implement Data Catalog with Data Governance in mind • How to build the roadmap and sustainable Data Lake architecture? • How to avoid Data Swamp or the most common mistakes? • How to support GDPR and implement proper Data Privacy? <p>Prerequisites for attending the course</p> <p>To successfully follow the course database, knowledge in data warehouse concepts and data modeling is required. Knowledge of big data technologies is an advantage.</p> <p>Recommended audience</p> <p>This training is intended for the following roles:</p> <ul style="list-style-type: none"> • Data and software architects • Business and data analysts • Data engineers and data scientists 		
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	<p>Today, Data Lake is crucial in every modern enterprise data architecture and standard when there is a need to support data-driven services and products. So through our various Data Lake projects in the context of data architecture modernization, we have implemented all crucial elements during a couple of years.</p> <p>After this course, you will be able to build and design sustainable Data Lake architecture in your environment, we talk about it in our blog.</p>		
25	<p>SQL BIG DATA EDITION</p> <p>SQL is a standard language for retrieving data in databases. It is mostly used by Software Engineers, Database Administrators, Business Analysts and Data Scientists.</p> <p>Goal of this course is to give introduction to basic SQL concepts and to show how they are implemented in Big Data technologies.</p> <p>Examples and exercises will be done through interactive notebook Apache Zeppelin using both standard SQL syntax and Spark SQL. Zeppelin is web-based notebook that enables data-driven, interactive data analytics and collaborative documents with SQL, Spark and more.</p> <p>Apache Spark is a framework for fast processing of large amount of data, often used for advanced analytics, data science, complex batch (ETL) processing and for real time processing.</p> <p>This course is made for the following audience:</p> <ul style="list-style-type: none"> • Data and Business Analysts who need to connect to the Hadoop databases and use Spark SQL processing engine for retrieving and processing data • Developers who should understand how to use SQL using Big Data technology like HDFS, Hive, Spark • Data Science team who needs to understand better SQL language <p>This course focuses on:</p> <ul style="list-style-type: none"> • Introduction to Databases and lite Spark • Simple SQL Queries • Retrieving Data from Multiple Tables • Scalar Functions and Arithmetic • Summary Functions and Grouping 	CROZSBDE	2

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	<ul style="list-style-type: none"> • Union • Subqueries <p>Prerequisite for SQL Big Data Edition: Basic knowledge of database concepts. This course is mixture of basic and advanced SQL course in Big Data environment.</p>		
26	<h2>NOSQL INTRODUCTION</h2> <p>Today modern architecture systems use different databases to upgrade functionalities which can not be efficiently resolved using traditional relational databases. Here come the Polyglot Persistence databases designed for special customer cases.</p> <p>The goal of this education is to become familiar with architectures and concepts of Polyglot Persistence databases. Besides the theoretical part participants will get practical experience working with customer cases using Neo4J, Cassandra, MongoDB.</p> <p>Participants will become familiar with:</p> <ul style="list-style-type: none"> ○ Graf, key-value, column, document ○ Key customer cases ○ Best practices <p>Audience:</p> <ul style="list-style-type: none"> • Software and Data Engineers and Developers • Software and Data Architects <p>Day 1:</p> <p>NoSQL Introduction</p> <ul style="list-style-type: none"> • Differences between relational and NoSQL databases • Use Cases <p>NoSQL database types</p> <ul style="list-style-type: none"> • key-value • document • column • graph • multi-model <p>Introduction to MongoDB (high level)</p>	CROZNoSQL	2

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	<p>Day 2:</p> <p>Introduction to MongoDB, Cassandra and Neo4J</p> <ul style="list-style-type: none"> • Distributed database on commodity hardware <p>Topics (theory and exercises)</p> <ul style="list-style-type: none"> • Json • Schema design • Standalone • Config file • Crud • Index • Replica set • Majority read write • Sharding • Security <p>Prerequisite: Basic knowledge of database concepts, and basic knowledge of Java programming language.</p>		
27	<p>APACHE KAFKA</p> <p>Apache Kafka is one of the most popular distributed streaming platforms today. Some of the biggest companies in the world use Kafka for their streaming data pipelines, streaming analytics, data integration or communication between microservices. Kafka is distributed system that scales easily to hundreds or even thousands of servers. It's fast and reliable.</p> <p>Integrating other systems with Kafka is not a problem. Applications easily integrate with Kafka through its Producer and Consumer API. If you want to connect other system like RDBMS, Elasticsearch or Hadoop, Kafka Connect comes to rescue. You can even develop streaming applications on Kafka using Kafka Streams. All of that and more can be learned in our new Apache Kafka course.</p> <p>One module = one day. Course is divided in 5 modules, allowing you to choose modules depending on your previous knowledge and preferences – whether it's application development with Kafka or maybe installation, configuration and security. Every module is followed by examples and exercises based on real life scenarios.</p>	CROZAK	5

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<p>Programming exercises will be in Java, so a basic knowledge of Java programming language is required.</p> <p>Day 1:</p> <ul style="list-style-type: none"> • Introduction to Kafka • Introduction to Confluent Platform • Consumer and Producer API • Using Schema Registry with Kafka and Avro <p>Day 2:</p> <ul style="list-style-type: none"> • Introduction to Kafka Connect • Kafka Connect examples of sink and source connectors • Integrating Kafka Connect with Schema Registry <p>Day 3:</p> <ul style="list-style-type: none"> • Introduction to Kafka Streams • Types of transformations in Kafka Streams • Developing and deploying Kafka Streams applications • Introduction to KsqlDB <p>Day 4:</p> <ul style="list-style-type: none"> • Kafka security • Encryption • Authentication • Authorization • Details around Kafka Connect <p>Day 5:</p> <ul style="list-style-type: none"> • Administration and monitoring • Advanced Kafka topics and best practices • Multicluster deployments • Cluster planning and sizing <p>Today, Apache Kafka is everywhere and de facto standard when you need exchanging messages in real-time. We are using Apache Kafka on our various integration projects during application development, i.e., Fraud detection system or modern data architectures such as Data Lake. After this course, you will be able to successfully use Apache Kafka in your environment.</p>		
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28	<p>INTRODUCTION TO PREDICTIVE ANALYSIS</p> <p>The introduction to predictive analysis course will focus on the following:</p> <ul style="list-style-type: none"> • Business applications of predictive analysis through examples • Basic models and techniques of predictive analysis (segmentation, grouping, associations, etc.) • Overview of tools in the market, with examples of selected implemented models 	CROZPA	1
29	<p>THE INTRODUCTION TO APACHE SPARK</p> <p>Apache Spark is a framework for fast processing a large amount of data fast. It is extremely useful for system architects, development engineers and business analysts, due to the ability to use it for any kind of data processing in any kind of environment.</p> <p>Apache Spark is a framework for processing a large amount of data fast. Apache Spark is a very popular system, often used for advanced analytics, data science, modern BigData architecture, as well as for the complex batch (ETL) processing and for processing in real time. Spark contains a few key components such as: Spark SQL for data structuring, Spark Streaming for processing a large amount of data in real time, Spark MLlib for machine learning, Spark GraphX for graph processing and SparkR for statistic data processing using R language. Spark can be started by itself, on a YARN (Hadoop) cluster or in a Mesos environment, so it can start in any environment. Spark is a polyglot framework, which means that it abstracts its usage to the maximum, and it imposes using a programme language (Python, Java, Scala, R), to the development environment, which fits the organization or the business type the best. All the examples in this education will be primarily processed in Python, but other programme languages, e.g. Scala, will also be used. The exercise will be done in the independent and cluster environment, depending on the assignment the participants will be working on.</p> <p>This education is aimed at system architects, development engineers and business analysts.</p> <p>The participants will get a brief introduction to Spark at the course, as well as the basic explanation of how Spark functions, and will, through interactive examples, go through an advanced analytics assignment</p>	CROZUAS	2

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	<p>and work on the target DataSet from the big data set download to the final visualization.</p> <p>Prerequisite: Basic knowledge of the Python programme language, knowledge of OO programming, advanced knowledge of the SQL language.</p>		
30	<p>APACHE SPARK - ADVANCED USAGE</p> <p>The course is aimed at the participants who want to advance their knowledge in the Spark environment, such as the Spark Streaming.</p> <p>All the examples in this education will be primarily processed in Python, but other programme languages, e.g. Scala, will also be used. The exercise will be done in the independent and cluster environment, depending on the assignment the participants will be working on.</p> <p>The participants will get all the necessary info about how to establish a streaming process for data processing in real time. They will learn about the MLib library for machine learning, where they will build a model for machine learning and a process of model training will be showed to them as well. By using the GraphX library for processing graph databases through a few examples, we will show how to use it efficiently in practice.</p> <p>This education is aimed at system architects, development engineers and business analysts.</p> <p>Prerequisite: Basic knowledge of the Python programme language, knowledge of OO programming, advanced knowledge of the SQL language.</p>	CROZASNK	2
31	<p>BUSINESS DATA MODELING</p> <p>The course gives an overview of business data modeling basics and concepts that can be applied using the conceptual model, the logical model, the physical model, the hybrid model, and the creation of a sustainable logical model. The course gives an overview of business data modelling basics and concepts that can be applied using the conceptual model, the logical model, the physical model, the hybrid model, and the creation of a sustainable logical model. Apart from that, attendants will be introduced to advanced modelling techniques such as collecting requests for data modelling, using standards in data</p>	CROZDM	2

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	<p>modelling, data modelling domains, and data model quality metrics. Each unit consists of a presentation and exercise for attendants.</p> <p>Content:</p> <p>The aim of the education program is to:</p> <ul style="list-style-type: none"> • Introduce the attendants to the methodological process of building conceptual, logical, and physical models so that they can be understood by business resources. • Bringing the attendants closer to the business and technical purpose of creating logical data models. • Show that data modelling as a methodology involves the software as a minor part of this process. <p>Suggested audience: business analysts, software architects, database administrators, software development engineers.</p> <p>To follow the course basic database and data modeling knowledge is required. Knowledge of database design is an advantage.</p>		
32	<p>BIG DATA AND ADVANCED ANALYTICS</p> <p>The purpose of this course is to explain all the key elements when setting up big data environment for the purposes of advanced analytics.</p> <p>Through the course, the participants will learn about the basic concepts of big data methodology and technology. The course includes some basic terms, such as predictive analytics, text processing and sentiment analysis. The participants will get a detailed insight into data-at-rest technologies, such as Hadoop and noSQL bases for batch processing a large amount of data. Other than that, data-in-motion technologies for processing data in real time (real-time, Streaming, IoT,...) will also be explained.</p> <ul style="list-style-type: none"> • Day 1: The introduction to big data environment <ul style="list-style-type: none"> ○ What is advanced analytics? ○ The concepts of advanced analytics (predictive, sentiment, ...) ○ How to establish a Data Science environment? ○ Data quality in a big data environment ○ Data visualization • Day 2: Data-at-rest – managing all the available data 	CROZBD	3

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	<ul style="list-style-type: none"> ○ General architecture for big data solutions and „Data Lake“ (data-at-rest overview) ○ The introduction to basic technologies for big data environment (Hadoop and Spark) ○ What is the „Polyglot persistence“ architecture and how to use NoSQL data bases? ○ How to modernize the existing architecture for the needs of the advanced analytics? ○ Program storage devices (DWH appliance machine) ○ Exercise: building an application for big data processing ● Day 3: Data-in-motion – managing data in real time <ul style="list-style-type: none"> ○ What is real-time, streaming and sensor data? ○ Lambda architecture – how to adapt batch and real-time analytics? ○ General architecture for big data solutions (data-in-motion overview) ○ Exercise: building an application for real-time processing <p>Target participants:</p> <ul style="list-style-type: none"> ● Architects ● Business analyst ● Data Science engineers ● Integration development process engineers <p>Duration: The course is divided to three days and there is a possibility of arranging the course by certain units:</p> <ul style="list-style-type: none"> ● Day 1: The introduction to big data technologies ● Day 2: Architecture, technology and development of big data managing ● Day 3: Architecture, technology and development of data managing in real time. <p>It is possible to participate in only one or two days or the whole three-day course.</p>		
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33	<p>INTRODUCTION TO DATA WAREHOUSING AND BUSINESS INTELLIGENCE</p> <p>This course aims to explain the technology, architecture, and methodology of data warehousing development and to define the roles and responsibilities of team members in charge of establishing a business intelligence system.</p> <p>It covers:</p> <ul style="list-style-type: none"> • Basic terms and concepts of data warehousing and business intelligence • Architecture, processes, infrastructure and technologies of the DW/BI system • The course consists of a presentation, demonstration, and exercises for attendants. <p>Suggested audience: business analysts, SW and data architects, database administrators, software development engineers.</p> <p>The aim of the education program:</p> <ul style="list-style-type: none"> • to introduce the attendants with the basics of business intelligence systems based on data warehousing; • to explain the technology, architecture, and methodology of data warehousing development; • to define the roles and responsibilities of team members in charge of establishing a business intelligence system. 	CROZDWHBI	2
Business Modeling and Analysis			
34	<p>INTRODUCTION TO BUSINESS MODELING</p> <p>The course serves as an introduction to the business modeling process.</p> <p>It presents short overviews of the following:</p> <ul style="list-style-type: none"> • Business process definition • Business processes and organization structure • Methodologies and tools for change implementation • BPM: project approach • Process modeling 	CROZBM	2

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35	<p>RATIONAL DOORS NEXT GENERATION</p> <p>IBM Rational DOORS Next Generation is the successor of IBM's Rational Requirements Composer tool.</p> <p>The course program focuses on:</p> <ul style="list-style-type: none"> the introduction and description of the tool, the functionalities of the tool, and the explanation of more relevant terms related to the tool; import, export, and synchronization options; tool exercises based on a prepared example (creating projects, creating artefacts, linking artefacts, working with attributes, history, creating tags, import, export, and synchronization). 	CROZRDNG	2
36	<p>IBM BAW (BPM) COURSE</p> <p>Participants will learn how to integrate with other systems through BPM to support the business process.</p> <p>Process application modeling and development using the Business Automation Workflow.</p> <p>Business Automation Workflow is a comprehensive platform of support to designing, implementing, testing, and optimizing business processes. The tool is intended for analysts and programmers. The exercises will show how quickly business applications can be created. Using the Coach framework, a user interface will be created that will utilize all the roles in a business process. The attendants will learn how to integrate with other systems through BPM to support the business process. BPM includes tools for administration, monitoring, and managing iBPM applications. You will learn to handle the basic tasks using these applications.</p>	CROZBPM	3
Testing			
37	<p>ISTQB FUNDAMENTALS</p> <p>This course covers basic ISTQB syllabus and it is a good preparation for internationally recognized ISTQB Foundation Level certificate.</p>	ISTQBF	3

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	<p>The course gives to a testers beginners a quick start into the world of testing trough the understanding of basic concepts, test techniques and activities in the testing process. The acquired knowledge are the basis for mastering more advanced topics and for further training through testing practice. Experienced testers and test managers course helps in systematization and structuring of the knowledge acquired through the practice.</p> <p>The content is aimed at understanding the whole picture and full coverage of testing, without focusing on the details of individual level, each type of test or individual test activity. Apart from theoretical concepts, the different techniques of design test cases that can be directly applicable in practical work are also covered.</p> <p>This course covers basic ISTQB syllabus and it is a good preparation for internationally recognized ISTQB Foundation Level certificate.</p> <p>Content:</p> <ul style="list-style-type: none"> • Testing Foundations • Testing the software lifecycle • Static techniques • Techniques test design • Test management • Testing support tools <p>Target audience:</p> <ul style="list-style-type: none"> • Testers • Test analysts • Test managers • End users who spend acceptance tests • Programmers • Line and project managers • Business and system analysts <p>Prerequisite: basic knowledge of the English language – working materials are in English</p>		
38	<p>SOFTWARE TESTING</p> <p>Through our lectures and specific exercises, gain or hone your skills and knowledge that a professional software tester needs in his daily work. We created the course based on a syllabus</p>	CROZTS	3

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	<p>(www.istqb.org/downloads/syllabi/foundation-level-syllabus.html) ISTQB (www.istqb.org) (International Software Testing Qualifications Board) that we use for preparations for ISTQB Foundation Level certificate test.</p> <p>The “Software Testing” course is intended for people who are in charge of testing in the software development process. Prior knowledge is not required.</p> <p>The course covers the following areas:</p> <ul style="list-style-type: none"> • Introduction on the course • Software testing basics • development process testing • Static testing techniques • Test design techniques • Testing management • Testing tools and support 		
Soft skills			
39	<p>PRESENTATION SKILLS AND PUBLIC PERFORMANCE TRAINING</p> <p>Good presentation of an idea will make that idea appealing. Bad presentation of an idea, on the other hand, can permanently halt its realization.</p> <p>Communication with groups of people and presentation skills make one of the elementary components of business literacy and business success. Good presentation of an idea will make that idea appealing. Bad presentation of an idea, on the other hand, can permanently halt its realization. Education without a high-quality trainer, who is not capable of knowledge transfer in a structured and effective manner, can in no way be of quality. How to present a product so as to be accepted by the target group?</p> <p>Training attendees will learn both in theory and practice how to:</p> <ul style="list-style-type: none"> • get over your fear of public performance • make a desired impression in the first 90 seconds • communicate with the audience • categorize presentation’s contents in a quality manner 	CROZPV	2

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	<ul style="list-style-type: none"> • adapt your presentation to the needs of the audience • answer unpleasant questions • effectively use PowerPoint • control all segments of non-verbal communication 		
40	<p>ASSERTIVE COMMUNICATION AND CONFLICT MANAGEMENT</p> <p>Consistent use of the principles for assertive communication yields a healthy working environment which minimizes conflict and stressful situations.</p> <p>An assertive style helps make communication more effective, open and authentic. It enables long-term development of a partnership, development of one’s self-confidence and achieving a win-win solution whereby satisfying both parties. Consistent use of the principles for assertive communication yields a healthy working environment which minimizes conflict and stressful situations.</p> <p>Participants will learn:</p> <ul style="list-style-type: none"> • How to deepen their perception of everyday business communication • How to advocate for their interests and the interests of their department or team in an adequate, confident and communicatively healthy way • A basic model for assertiveness and basic ego status through which the behavior of others in the communication process can be classified and the communication process can be directed accordingly in the desired direction. • Models, messages and styles of assertive communication which can be used in order to increase the effectiveness of your communication, especially in situations where communication is difficult. • Deal with others’ criticism or aggressive behavior • How to give criticism or bad news • How to say “no” in an assertive way 	CROZAKUK	2

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41	<p>EFFECTIVE TIME MANAGEMENT</p> <p>The course will be conducted through numerous interactive presentations, exercises and examples from everyday life.</p> <p>During this course, participants will become familiar with the principles, techniques and tools that will allow them to organize and use their time adequately and effectively. At the same time, they will learn how to avoid „robotization“ and keep their personal and professional creativity.</p> <p>At the end of this course, participants will be able to:</p> <ul style="list-style-type: none"> • Recognize the difference between employment and efficiency • Effectively establish personal goals • Effectively plan their time • Independently recognize and correct „bugs“ in time management • Prioritize tasks • Effectively organize the execution of their tasks based on their priorities • Effectively delegate tasks • Recognize the real causes of stress • Apply adequate strategies and techniques for stress management • Develop a customised time management system based on one’s natural rhythm of work and focused on quality and creativity <p>The course will be conducted through numerous interactive presentations, exercises and examples from everyday life.</p>	CROZUV	1
42	<p>SUCCESSFUL NEGOTIATION</p> <p>The objective of this training is quite clear – to improve the negotiation skills of all participants.</p> <p>Participants will learn:</p> <ul style="list-style-type: none"> • the basic concepts of negotiating • management of the negotiation process 	CROZUP	2

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	<ul style="list-style-type: none"> • the phases of the negotiation process and the legitimacy of each • how to select an adequate style and technique for negotiating, depending on the situation at hand • adequately prepare for negotiating • objectively take into account all sides and their interests while negotiating • negotiate in a relaxed manner and take time to make decisions • take advantage of opportunities while negotiating and make the best of disadvantageous situations • direct the course of the negotiation to a win-win situation 		
43	<p>TEAM LEADING AND MOTIVATION</p> <p>Through this training, students will learn to pay attention to all the factors that affect personal performance and motivation. Some of these factors are obvious, while some are hidden but extremely important. Participants will learn what the real foundations of successful people leadership are, look at their leadership tasks much more broadly, and learn how to approach each employee individually and increase their effectiveness. This training is focused on the individual leader-employee relationship and on the personal approach to each employee.</p> <p>Participants will learn:</p> <ul style="list-style-type: none"> • what are the components of corporate and individual performance • view the complete picture of the tasks that a successful leader must perform • The elements and qualities that a successful leader must possess • The theoretical and psychological underpinning of motivation • Assess what motivates employees and use different techniques • motivation • The theoretical underpinning of situational leadership • Use different leadership styles for each employee • Successfully provide feedback to employees • Prioritize leadership tasks 	CROZVMT	2

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	<ul style="list-style-type: none"> • develop employee competencies • Exactly set expectations for each employee 		
44	<p>SALES STRATEGY AND TACTICS</p> <p>Basically speaking, sales in most industries do not boil down to exchanging goods and services for money, but involve a quality and healthy relationship with the client, taking into account the needs of both sides and resulting in mutual pleasure.</p> <p>Key Account Manager, Sales Manager, Sales Specialist, Sales Assistant – what exactly does this person do, what is his role, and how should he do that job? The answers to these questions are different in almost any organization, but anyone involved in the sales process should be informed of those principles.</p> <p>Basically speaking, sales in most industries do not boil down to exchanging goods and services for money, but involve a quality and healthy relationship with the client, taking into account the needs of both sides and resulting in mutual pleasure.</p> <p>This training program is intended for sales staff in high-value service and product industries and it offers them a sales methodology based on the needs of the client. It enables them to create successful offers, to develop a winning sales strategy with each client, and to develop a relationship with key user employees, including top management.</p> <p>Course attendants will learn:</p> <ul style="list-style-type: none"> • to define their role and behavior in the sales process; • to create quality and long-lasting relations with users; • to analyze the user’s situation, to understand all the variables that affect the profitability of the users, and to communicate with the users through these variables; • to create new user value through their products and services; • to communicate with users focusing on their critical initiatives and success factors; • to understand the rules of communication and the power structures on all management levels; • to develop a communication plan and a sales strategy; • to be able to search for relevant information from teams in their own organization; 	CROZSTP	2

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	<ul style="list-style-type: none"> to be able to make use of the basic negotiating and influencing skills. 		
45	<p>COMMUNICATION IN CONSULTING</p> <p>This program is designed for employees of companies that don't have a consultant training program, but who work as consultants, forming a quality perception of the work a consultant does and educating them in all the skills that are necessary for successful and high-quality work.</p> <p>The nature of most consulting jobs involves constant communication with colleagues and clients on all levels of hierarchy, from production workers to board members, the need for excellent presentation skills, negotiating skills, the ability to forge open and lasting relations, and many other communication skills.</p> <p>To a significant extent, the success of the consultant and the company he represents depends on these skills, on conscious planning to build relations and impressions on the client, and a very broad understand of the job of a consultant.</p> <p>This program is designed for employees of companies that don't have a consultant training program, but who work as consultants, forming a quality perception of the work a consultant does and educating them in all the skills that are necessary for successful and high-quality work. The training will adapt to the area and method of work of the training group.</p> <p>Course attendants will learn:</p> <ul style="list-style-type: none"> what it means to be a consultant, the expected forms of behavior and work method; success factors in the job of a consultant; to understand clients, their needs, and their way of thinking; business communication basics; to analyze their own current communication strategy; to plan the future communication strategy with clients; to do a communication profile on the clients and approach them in an appropriate way; to build trust and openness in relations with clients; to learn to handle usual communication situations in practice through play; 	CROZKUK	2

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	<ul style="list-style-type: none"> • the role and analysis of situations; • communication ethics. 		
46	<p>BUSINESS COMMUNICATION</p> <p>Knowing the basic laws of communication processes is the basis and prerequisite for the development of other business communication skills.</p> <p>Communication is our connection to the world, the basic tool we use to achieve our goals, to form life and business situations, and to create an image of ourselves to others. Knowing the basic laws of communication processes is the basis and prerequisite for the development of other business communication skills. A lack of quality communication causes many issues in the business world – misunderstandings, horizontally and vertically strained relations among employees, miscommunications, lack of understanding, and many others.</p> <p>Problems arise since we spend most of the time during communication treading the surface, the topics and content, whereas the greatest part of the communication process takes place at psychosocial levels that are rarely made aware, where the real desires and motives, liking and disliking, fear, tolerance, acceptance, emotions, closeness, status of the collocutor, a feeling of safety and trust and many others are immensely important.</p> <p>This training course offers knowledge and experience of quality communication, where information, opinions, and attitudes are communicated in a complete and healthy manner, respecting the attitudes, beliefs, and specific qualities of all parties in the communication process.</p> <p>Attendants will learn:</p> <ul style="list-style-type: none"> • what communication channels are and how to manage them; • how to develop trust and open relations in a business environment; • to recognize and understand other people’s motivation; • to have a better understanding of the behavior of others based on the theory of communication styles; • to employ active listening in the business environment; 	CROZPK	2

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	<ul style="list-style-type: none">• to effectively convey messages in the business environment;• to manage difficult communication situations and to manage conflicts;• the basics of influencing in communication;• the laws and practice of non-verbal communication, with emphasis on the business environments.		
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