CERTIFICATE SUPPLEMENT
EITCA/KC/KVG25004417

Certificate ID: EITCA/KC/KVG25004417
Certificate type: The European Information Technologies Certification Academy Programme
Academy name: EITCA Information Technologies Key Competencies Programme (EITCA/KC)
Issue date: January 2025 (updated in February 2025)
Holder's name: Katarzyna Luiza Kolacz
Holder's country: Poland
Examination center: CompSecur Sp. z o.o., Wroclaw, Poland
Earned ECTS credits: 24

EITCA/KC Programme (version/revision: v4r2) component EITC Certificates: **Result:**

EITC/BI/BAS Business and administration software 100%
EITC Certificate number: EITC/BI/BAS/KVG25004417

Certificate Programme description: Introduction to knowledge associated with computerization of business / administration: needs and potential for computerization in institutions (objectives of an institution, business areas, benefits of computerization), business requirements analysis, problem of information security; information and communication technologies solutions overview: information and communication infrastructure, software support for main business processes, software for enterprise management, complex ERP systems, other solutions based on information technologies (real time collaboration software, internet based communication solutions, mobile solutions, systems of authorization and access control, monitoring systems), customer relationship management - CRM systems: introduction and overview of CRM systems functionality, exemplary CRM systems (installation, configuration and system administration, customers, sales, graphs and reports, calendar and activities organization, auxiliary tools and interface organization), Internet telephony: VoIP technology, benefits and problems related to usage of Internet telephony, VoIP devices, Internet telephony market, VoIP in practice - using VoIP software and hardware
Certificate Programme version/revision: EITC/BI/BASv1r2

EITC/SE/CPF Computer programming fundamentals 78%
EITC Certificate number: EITC/SE/CPF/KVG25004417

Certificate Programme description: Introduction to object-oriented and event-driven programming: variables and data types, overview of programming paradigms (imperative, procedural, structural, object-oriented and event-driven programming), idea of object-oriented programming (classes and objects, inheritance and polymorphism); Programming in C# on Microsoft .NET platform: .NET Framework, Visual Studio .NET programming environment, syntax and semantics of C# language (program structure, variables and data types, operations and operators, functions, methods, imperative data-flow structures), console applications, object aspect of C# language, object model of .NET environment, classes and objects in C#, creation of window-based applications (Windows Forms object model, forms, controls and attributes, event handling implementation); code re-usage and open-source software: object-oriented programming and code re-usage, free software idea, social networks programming
Certificate Programme version/revision: EITC/SE/CPFv1r2

EITC/INT/ITAF Internet technologies and applications fundamentals 84%
EITC Certificate number: EITC/INT/ITAF/KVG25004417

Certificate Programme description: Websites: operating principles, WWW and HTTP architecture, web browsers (search mechanisms, image search), secure login to the services (authorization and authentication, SSL certificates); Creation of a simple website: the basics of HTML and CSS; Network dataflow: FTP, web services for file sharing, networking basics (IP, Wireless, Voice over Internet Protocol), text terminals telnet protocol, SSH protocol, remote connection applications; Efficient searching for information on the web: online maps applications, open encyclopedia (content co-authoring); advertising portals, online videos, news on the Internet, Internet translators (operation mechanisms, content translation); Internet communication tools: text messaging, electronic mail (theoretical fundamentals), online collaboration systems (Google Apps), video and audio communicators; Information society: definition, groups, blogs, Web 2.0 paradigm; Advertising on the Internet: advantages and disadvantages, contextual advertising, Google AdWords, Google AdSense, basics of web positioning; Formal aspects of information processing on the Internet: legal acts and regulations concerning processing of information on the Internet, copyrights
Certificate Programme version/revision: EITC/INT/ITAFv1r2

EITC/CG/APS Raster graphics processing software (Adobe Photoshop) 74%
EITC Certificate number: EITC/CG/APS/KVG25004417

Certificate Programme description: Introduction: downloading and installation of application, basic concepts (bitmap graphics, resolution standards, compression); User interface: workspace, commands, palettes, preferences, keyboard shortcuts, navigation through a document, views; Image parameters: rotation, cropping, histogram correction, noise blurring, sharpness improvement, color correction, examples (red eye effect removal, adjusting hue and saturation irises, object geometry corrections); Photomontage: design analysis, editing tools: pen, layers (working with multiple layers, editing, locking, transformations, layer properties, alpha channel), selections (selections stored in files), manual image adjustments (tools, brushes, light and shadow adjustment); Portrait retouching: eyes (hue/saturation, smudge tool), mouth, teeth (sharpening, unsharp mask), skin (eyedropper tool, clone stamp tool, blur tool), hair (chiaroscuro); Silhouette retouch: appearance modification, needed tools (liquify filter, density, liquify panel, pucker tool, bloat tool, reconstruct tool); Website graphics elements: basic aspects (web safe palette, dimensions, fonts, photos), vignette, vector objects, layer style (elements styling, color, gradient, shadow, glow), text objects, small graphics elements, styles, actions (batch sequence), images export (image size, cutting); Print publishing: working on a print publication (image styling, print area, scaling, typography in print publication), offset printing (reproduction of images)
Certificate Programme version/revision: EITC/CG/APSv1r2

This document is a formal attachment to issued certificate. All rights reserved. European IT Certification Institute, EITCI asbl, Brussels, Belgium, European Union

EITC/INT/JOOM Website design and content management systems fundamentals (Joomla)

80%

EITC Certificate number: EITC/INT/JOOM/KVG25004417

Certificate Programme description: Getting familiar with the concept of Content Management System (CMS): purpose, architecture, applications, types of CMS; Joomla! content management system: Description of system architecture (configuration settings, access rights, workflow), basic functionality; Joomla! installation: The XAMPP (Apache web server, MySQL), web installer (settings); Introduction to Joomla! CMS: appearance (menus, functions, advertisements, login form module), localization, adding new users (user management, user hierarchy); Website: control panel , media, service configuration (system settings, service settings); Sections: categories (articles, front page content); Menu: available menus overview, modifications, creating new menu; Menu items: types, possible settings, adding menu items; Components: ads (ad categories), RSS feeds, polls; Extensions: templates, modules (incl. administrator modules), installing extensions; Tools: messaging, mail merge, e-mail setup, additional extensions
Certificate Programme version/revision: EITC/INT/JOOMv1r2

EITC/BI/MSO10 Office software fundamentals (Microsoft Office 2010)

98%

EITC Certificate number: EITC/BI/MSO10/KVG25004417

Certificate Programme description: > Microsoft Office Word: Introduction: main window, ribbon, Microsoft Office Button, Quick Access toolbar, printable and nonprintable characters, ruler, paragraph, indentation, margins, navigation, keyboard shortcuts; Document creation and edition: simple editing (copy, paste, cut), text formatting (font type, style, size), text alignment, line spacing, bullets and numbering (multilevel lists), auto-formatting (styles, table of contents, footnotes); Tables: creation methods, selection in tables, automatic formatting, table properties, text in a cell, AutoFit, cell size adjustment, graphical formatting; Objects in document: images (inserting and formatting), shapes (shape selection menu, categories of shapes, shape formatting, text in shapes), footer and header, SmartArts (inserting, categories, editing and formatting) > Microsoft Office Excel: Introduction: basic definitions and concepts (cell, cell edition, formulas), sample formulas, cell references (relative, absolute), cell formatting (number formats, graphical formatting); Usage of spreadsheets in business: sample formulas and functions (basic, statistical, financial, etc.), pivot tables (creation, filters, row and column labels, values, functionality), data grouping, data sorting, data validation (validation criteria, messages); Charts: chart creation, chart data, chart types, chart as an object (design, layout and format tabs), chart graphical and 3D formatting, sample charts; Excel options, module installation and usage (Solver tool example); Visual Basic language in Excel: basic concepts in VB (variables and arrays, procedures and functions, conditional statements, loops, cell and sheet access), macros (VB editor, defining events, creation, running and examples of macros) > Microsoft Office Power Point: Introduction: main window, slide, notes, fields on a slide; Creating a presentation: title slide, creating and editing a slide (types of slide layouts), themes (theme editing), slide show; Objects on a slide: inserting and editing objects, usage examples (formatting, many shapes insertion, shape connectors), objects overlapping, editing objects (shapes, SmartArts, images, tables); Object animation and transitions between slides: animation definition, animation modification (custom animation, auto-preview, animation effects, animation parameters, timing, triggers), adding and editing transitions between slides (single transition, transition parameters); Spell checking in MS Office (error corrections, dictionary); Slide Sorter view (slide operations: move, duplicate, copy, paste, delete); Printing (print types); Help in Microsoft Office (search for help topics, online and offline mode)
Certificate Programme version/revision: EITC/BI/MSO10v1r1

EITC/BI/GADW Internet advertisement and marketing fundamentals (Google AdWords)

60%

EITC Certificate number: EITC/BI/GADW/KVG25004417

Certificate Programme description: Introduction to online advertising: Internet marketing (definitions, Internet usage statistics, Internet marketing tools and paradigms), basic e-advertising formats, advantages and disadvantages of online advertising; Google AdWords system: Advertising with Google AdWords (Google Inc. Advertising Principles and requirements for ads approval, ads displaying and scheduling, features of advertising with Google AdWords system); AdWords Account: account types, campaign creation (campaign settings), keyword management, fundamental principles for text ad creation; Main elements of Google Network: ad targeting in Google AdWords (targeting types, conditions for targeting specific users), keyword matching options (possible match types), AdWords payment types; AdWords ads effectiveness testing: impact of quality on search results, methods of monitoring ads effectiveness, report feature (types of reports), conversion role; Payments in Google AdWords system: Billing process (billing cycle, European Union Value-Added Tax - EU VAT); Landing pages and account optimizing: keywords, placements, ads scheduling, ads positioning (setting position preferences), advanced optimization; Google AdWords Tools: usage of Google AdWords tools, AdWords Editor application characteristic (View and Sort Information functionalities); Google Analytics - website statistics and visits tracking system : account creation, main advantages, differences between Google Analytics and conversion tracking, methods of efficient usage of statistics, main indicators in Google Analytics; Google AdWords features: My Client Center (client accounts management), AdWords API (advantages and benefits, API features)
Certificate Programme version/revision: EITC/BI/GADWv1r2

EITC/DB/DDEF Databases and data engineering fundamentals

73%

EITC Certificate number: EITC/DB/DDEF/KVG25004417

Certificate Programme description: Introduction: database requirements, characteristics of databases, database technology, data model, database systems (RDBMS), interaction and communication with the database and implementation technology of database applications (communications architecture); Relational databases: data structure, integrity constraints, data operations, data representation (rules of entities transformation into relational model); Introduction to SQL query language: SQL as a declarative language, database queries (projection, expression, aliases, duplicates elimination, sorting results of a query, selection); preparation of a laboratory environment; SQL functions: aggregate functions, operators, set operators (join, outer join), subqueries (subqueries types), insertion of tuples into relation, modification and deletion of tuples from relation; Microsoft Office Access: database creation (defining relationships between tables, field formatting), queries, reports wizard, forms, external data (data export, data import); Artificial Intelligence: decision support systems (expert systems, data mining), semantic networks; Normalization: normal forms (first normal form, second normal form, third normal form)
Certificate Programme version/revision: EITC/DB/DDEFv1r2

EITC/IS/ISCF Information security and cryptography fundamentals

100%

EITC Certificate number: EITC/IS/ISCF/KVG25004417

Certificate Programme description: Information security threats: intentional threats, unintentional threats, malicious software (spyware, antivirus software); Information security policy: the security policy areas, security policy rules, examples; Information security audit: audit IT tools; Introduction to cryptography: information security history, breakthroughs in cryptography, cryptology; Confidentiality and encryption techniques: substitution cypher (types, examples), number systems (writing system, system types), Boolean functions, transposition cipher (matrix-based implementation of the cipher), one-time pad (encryption, key usage); Symmetric and asymmetric cryptosystems: encryption as a mathematical process, cryptosystems (construction, usage, defects, security), ideas of quantum cryptography; Biometric systems: the biometrics term, biometric system scheme (object identification in security systems - identification characteristics); Certificates: application, structure of a certificate; Hash functions: string conversion; Digital signature: operating principles, characteristics of digital signature; Kerberos server verification: authentication, passes

This document is a formal attachment to issued certificate. All rights reserved. European IT Certification Institute, EITCI asbl, Brussels, Belgium, European Union

Certificate Programme version/revision: EITC/IS/ISCFv1r2

EITC/CN/CNF Computer networking fundamentals

73%

EITC Certificate number: EITC/CN/CNF/KVG25004417

Certificate Programme description: Introduction: basic concepts of computer network, models of computer networks, types of network implementations, network communication paradigms (circuit-switched networks, packet-switched networks, network communication paradigms comparison); Network topologies: review of network topologies (point-to-point - P2P topology, bus topology, star topology, ring topology, tree topology, mesh topology, mixed topologies), topologies classification (linear topologies, centralized topologies, decentralized topologies), network topologies at different network abstraction layers; Layers model of network communication: ISO/OSI reference model for layers, simplified layer model of network; Technologies and protocols of media layers: local area network [LAN] (Ethernet - physical layer, data link layer), wide area network [WAN]; Network devices operating in media layers: network interface cards (NIC), repeaters, network hubs, bridges, switches, other network devices; Wireless networks: radio frequency and frequency sharing techniques (FDMA - frequency division multiple access, TDMA - time division multiple access, CDMA - code division multiple access), wireless LAN [WLAN] (WiFi, Bluetooth), mobile networks - mobile technologies (mobile standards); Internet - network layer protocols: data encapsulation and transmission, the IP protocol, IPv4 (packet construction, IPv4 addressing, subnetting and supernetting), IPv6, ICMP control protocol, Internet - transport protocols (TCP - TCP segment structure, UDP); Application layer - network services: e-mail (SMTP, POP3, IMAP), web services - HTTP, file transfer - FTP

Certificate Programme version/revision: EITC/CN/CNFv1r2

EITC/BI/TF Telework fundamentals

89%

EITC Certificate number: EITC/BI/TF/KVG25004417

Certificate Programme description: Introduction to telework: flexible forms of employment in the current labor market situation, a review of the telework definition, telework history; Telework and its organizational forms: types of telework (telework at home, telework performed outside the place of residence), telework and outsourcing, the personality-characterological portrait of teleworker, telework and disabled person; Telework SWOT analysis: strengths of telework (telework benefits from the employer's perspective, the strengths of telework for the teleworker), telework weaknesses, opportunities, threats; Psychosocial aspects of telework: psychological factors of telework, telework social conditioning; Companies transformation process: ICT in modern enterprises, required telework equipment; Information technologies for telework (software): internal communication systems, internal publishing systems, internal collaborative systems (Google Apps as a tool for communication and collaboration, Microsoft Office Sharepoint for communication and employees management); Information technologies for telework (hardware): portable computers, mobile devices, wireless Internet access, VoIP telecommunications systems, GPS location systems; Telework in the world: telework in USA, telework in EU, global perspective

Certificate Programme version/revision: EITC/BI/TFv1r2

EITC/BI/CAPMF Computer-aided project management fundamentals

82%

EITC Certificate number: EITC/BI/CAPMF/KVG25004417

Certificate Programme description: Introduction to management: management concepts, basic management functions, major trends in human resources management, organization, teamwork (team creation, team types, standards, and objectives, roles of group members and their skills, assertiveness, conflict), communication and its role (effective communication, types of communication in organizations, active listening and communicating); Project management and human resources management: basic concepts of motivation, human relations and human resources model, theory of needs, leadership (situational approach to leadership, transformational leadership), recruitment (internal and external recruitment, trait theory, job interview), training (training effectiveness); Introduction to project management: project implementation stages, project management in practice, project schedule (PERT method); Prince2 methodology: processes in Prince2-managed projects, components in the Prince2 methodology; Microsoft Project 2010: installation, application introduction, ribbon, tasks workspace, charts workspace (Gantt chart, network diagram, workload diagram); Formal aspects of information security: secure systems design principles, STRIDE model (Data Flow Diagrams, constructing threat model in STRIDE methodology)

Certificate Programme version/revision: EITC/BI/CAPMFv1r2

This document is a formal attachment to issued certificate. All rights reserved. European IT Certification Institute, EITCI asbl, Brussels, Belgium, European Union