# National Adaption Plan – Appendix I

Mapping of Training Programs

# Content

# 1 Germany

## 1.1 Training Offers in Information Security

| Name of Training Course | Main Content / Objective | Target Groups (basic /intermediate / proficiant user) | Skills acquired (professional, social and transversal) | Kind of Testimonial |
|---|---|---|---|---|
| Apprenticeship IT Specialist (EQF 4) | Application Development: IT specialists in application development design and implement customer-specific software applications by using methods of project planning, implementation and control, as well as applying software development tools. Testing applications and correcting errors through the use of expert and diagnostic systems are just as much a part of their activities as advising and training users. Systems integration: IT specialists specializing in system integration work in the IT sector, in companies in almost all economic sectors as well as in organizations and in the public sector. They design, install and administer networked IT systems for internal and external customers. Data Process Analysis: IT specialists specialising in data and process analysis work in the IT sector, in companies in almost all economic sectors as well as in organisations and in the public sector. They ensure the availability, quality and quantity of data and develop IT solutions for digital production and business processes. | basic user, access at any age (<18 with medical certificate), predominantly first-year trainees with university entrance qualification; if qualification is obtained from abroad, an equivalence certificate can be obtained | All: • identify customer needs in line with the target group • select hardware and software and initiate procurement • configure and test an IT workstation and, in doing so, comply with the regulations and company specifications on data protection, IT security and quality assurance • instruct customers in the use of the workstation, and design training • control and record the performance of the service  Application development: • Designing and implementing customised software applications • Ensuring the quality of software applications Systems integration: • Designing and implementing IT systems • Installing and configuring networks • Administrating IT systems | IT Specialist diploma |

| | Digital Networking: | | Data Process Analysis: | |
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| | IT specialists specialising in digital networking work in the IT sector, in companies in almost all economic sectors as well as in organisations and in the public sector. They work with the network infrastructure and the interfaces between network components and cyber-physical systems. They network and optimise systems and applications at the IT level. They secure data against unauthorised access and prevent/remedy system failures. | | • Analysing work and business processes<br>• Analysing data sources and providing data<br>• Using data to optimise work and business processes and to optimise digital business models<br>• Implementing data protection and data security protection goals<br><br>Digital Networking:<br><br>• Analysing and planning systems for networking processes and products<br>• Setting up, modifying and testing networked systems<br>• Operating networked systems, ensuring system availability | |
| Apprenticeship IT system electronics technician (EQF 4) | IT system electronics technicians work in the IT industry, in companies in almost all sectors of the economy as well as in organisations and in the public sector. They are employed in particular by manufacturers and operators of IT infrastructures and IT systems as well as by installation companies for security technology. Their work also includes electrotechnical work in the IT sector. | Basic user,<br>High School diploma, secondary school diploma and general school diploma, few without any school diploma | • Installing and configuring IT devices and IT systemsf<br>• Installing network infrastructures and transmission systems<br>• Planning and preparing service and maintenance measures on IT devices and IT systems and their infrastructure<br>• Performing service and maintenance work on IT devices and IT systems and their infrastructure<br>• Completing orders and supporting users in handling IT devices and IT systems and their infrastructure<br>• IT security and data protection in IT systems, network infrastructures and transmission systems | IT system electronics technician diploma |

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| | | | <ul><li>Installing IT systems, devices and equipment and connecting them to the power supply</li><li>Testing the electrical safety of devices and equipment</li></ul> | |
| Apprenticeship IT-System Management (EQF 4) | Analysing requirements for IT systems, developing and implementing consulting strategies, developing concepts for IT solutions and coordinating their implementation, preparing offers and concluding contracts, applying instruments from sales marketing and sales, applying instruments of commercial management and control, procuring hardware and software as well as services, planning, preparing and carrying out work tasks in coordination with customer-specific business and service processes, informing and advising customers, assessing IT systems available on the market and customer-specific solutions, developing, creating and maintaining IT solutions, carrying out and documenting quality assurance measures, implementing, integrating and checking measures for IT security and data protection, providing services and completing orders. | Basic user, High School diploma, secondary school diploma and general school diploma, few without any school diploma | <ul><li>Analysing requirements for IT systems</li><li>Developing and implementing consulting strategies</li><li>Developing concepts for IT solutions and coordinating their implementation</li><li>Preparing offers and concluding contracts</li><li>Applying instruments from sales marketing and sales</li><li>Applying instruments from commercial management and contro</li><li>Procuring hardware and software as well as services</li></ul> | IT system electronics technician diploma |
| Apprenticeship Digitalisation Management Assistant (EQF 4) | Analysing work, business and value creation processes, determining the need for information and providing data, digitally developing business models, initiating and drafting contracts, planning and implementing procurement, applying commercial management and control instruments, implementing data security objectives, complying with data protection regulations and other intellectual property rights, planning, Preparing and carrying out work tasks in coordination with customer-specific business and service | Basic user, High School diploma, secondary school diploma and general school diploma, few without any school diploma | <ul><li>Analysing work, business and value creation processes</li><li>Determining the need for information and providing data</li><li>Digitally developing business models</li><li>Initiating and drafting contracts</li><li>Planning and implementing procurement</li><li>Applying instruments of commercial management and control</li></ul> | IT system electronics technician diploma |

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| | processes, informing and advising customers, assessing marketable IT systems and customer-specific solutions, developing, creating and maintaining IT solutions, carrying out and documenting quality assurance measures, implementing, integrating and checking measures for IT security and data protection, providing services and completing orders. | | • Implementing the protection goals of data security<br>• Compliance with the provisions on data protection and other protective rights | |
| IT-Security Technicians (EQF 5) | IT security technicians classify systems according to specified guidelines and ensure basic protection for premises according to the basic protection manual of the Federal Office for Information Security. They take stock of the spatial, technical and organisational conditions, identify possible weak points and determine the security requirements. They then implement security measures tailored to the customer's needs and wishes as part of the building management (facility management), adapt the security solutions, integrate them into the IT infrastructure and the IT system management, carry out functional tests, pilot operations and training courses and rectify any faults. Accompanying their work, they document the development steps and the test results. Within the IT specialist profiles, IT security technicians belong to the group of technicians. | A specific previous vocational training is not prescribed. As a rule, the further training is completed following training in the field of information and telecommunications technology. | Participate in the construction of security systems, e.g.<br>• -ecord the actual state, determine protection requirements, develop a security concept<br>• develop technical solutions, define and integrate interfaces<br>• plan and coordinate project implementation and technical realisation<br>• procure components, obtain building clearance and access possibilities, carry out and monitor the rough installation and fine installation-commission the security system, support integration into existing systems, carry out pilot operation of the entire system<br>• instruct and train users, prepare documentation, participate in acceptance<br>• rectify defects, provide remaining services. | Technician Certification |
| IT Security Coordinator (EQF 5) | IT Security Coordinators advise and support management, partners and customers on the IT security of critical business processes. They work on the creation of the IT security policy and design appropriate security solutions in accordance with the applicable technical standards, laws and other regulations. IT Security Coordinators analyse IT | A specific previous vocational training is not prescribed. As a rule, the further training is completed following training in the field of information and telecommunications technology. | Maintaining IT security<br>• preparing regular management reports on the current security situation, examining the functionality and actuality of security processes and measures as well as security risks | Coordinator Certification |

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| | risks and vulnerabilities, draw up organisational and technical security concepts together with the relevant specialists and draw up guidelines and regulations on information security. They implement IT security measures and develop and introduce risk-reducing measures and security procedures, taking into account new products and processes as well as economic conditions. They ensure the training and sensitisation of employees. | | performing risk assessments and functional tests-preparing an IT security concept<br><br>• coordinating protection goals with decision-makers, checking the achievement of protection goals, improving protection measures if necessary<br><br>• documenting protection goals, test results and action plans<br><br>Implementing the IT security concept-plan and implement the security concept or concrete necessary security measures and changes<br><br>• check and document implementation, plan and organise security training for IT users, perform functional and effectiveness tests.<br>• Plan and implement concrete necessary security measures and changes<br>• Check and document implementation, plan and organise security training for IT users, carry out functional and effectiveness tests<br><br>Contribute to updating the IT security policy<br><br>• Contribute to identifying critical business processes and associated company values<br>• Contribute to identifying and evaluating risks | |

## 1.2 HE Possibilities

| Study programme | Short description |
|---|---|
| M. Sc. Applied IT-Security | • Part-time correspondence course<br>• Covers IT security and new technologies<br>• Addresses (economic) computer scientists, physicists and mathematicians, engineers |
| M.Eng. IT Security and forensic science | • Part-time correspondence course<br>• Train experts for IT security in companies and public institutes<br>• Detect cyber attacks in time and plan and implement appropriate security measures |
| MBA Compliance and data protection | • Part-time<br>• Training as management and technical specialist in the areas of compliance and data protection, fraud and risk management, controlling and corporate ethics, corruption prevention |
| M.Sc. Security Management | • Part-time<br>• Business and technical IT-relevant security topics<br>• Individual profiling with elective subjects possible (e.g. bank security, cyberwar and cybersecurity, information security or IT forensics) |
| M. Sc. Digital forensic science | • Part-time<br>• Information and telecommunications technology<br>• Legal science |
| LL.B. Legal Tech | • Full-time<br>• Legal studies (focus information and communication law) with modules in business computing |

## 1.3 Private Training Possibilitites

| Provider | Course Name | Short description | Duration | Certificate | Cost |
|---|---|---|---|---|---|
| Bitkom | BSI IT Basic Protection Practitioner | • expertise to independently set up an information security management system (ISMS) according to the specifications of the BSI | 4 Days | IT Basic Protection Certificate (BSI) | 2.130€ |
| TÜV | IT Security Officer | • up-to-date knowledge of the requirements of the relevant standards (such as ISO/IEC 27001 and IT-Grundschutz according to BSI) | 4 Days | TÜV Certificate | 3.105€ |

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| | | • document acquired expertise with a certificate<br>• take into account aspects and requirements of information security | | | |
| DGI Akademie<br>(one out of 11 avilable courses:<br>https://dgi-ag.de/akademie/ausbildungen-mit-personenzertifikat/) | IT-Sicherheitsbeauftragten (ITSiBe) / Chief Information Security Officer (CISO) | • Early risk detection and prevention<br>• concrete planning, implementation, maintenance and monitoring of a functioning information security management system (ISMS)<br>• Raising awareness among employees and advising management, taking into account different standards | 4 Days | DGI personal certificate | 2.270 € |
| SGD | Information Security Officer (IHK / SGD) | • Apply information security objectives<br>• Secure data processing and transmission<br>• Implementation of technical data protection measures<br>• Design individual information security concepts<br>• Create a concept for emergency management | 12 Weeks (10 Hours per week) | SGD /IHK Certificate | 2.450,00 € |
| DEKRA | Information Security Officer Training | • Information Security (IS)<br>• Information Security Management<br>• ISMS according to ISO/IEC 27001ff or ISMS according to IT-Grundschutz (BSI)<br>• Current concepts of information security<br><br>These topics are divided into several subject areas:<br><br>• Organisation<br>• Infrastructure<br>• Network security<br>• System security<br>• Application security<br>• Tools | 4 days | DEKRA Academy Certificate | 2.750 € |

## 2 Austria

### 2.1 VET Possibilities

| Name of Training Course | Main Content / Objective | Target Groups (basic /intermediate /proficient user) | Skills acquired (professional, social and transversal) | Kind of Testimonial |
|---|---|---|---|---|
| **Information Security basics** | The seminar provides an insight into the topic of information security. It explains terms such as "data" and "information security" and gives an overview of the current standard series ISO 27000. After the seminar, the contents of an information security management (ISMS) are understood. One is capable of the potential security needs of the company and can identify solutions for the protection of corporate information. | Entrepreneurs, managers, decision makers, QM and prospective DS Officer, interested parties | • Recognizing the real threats from criminals operating in the network; • Recognition of social engineering attacks; • Knowledge of security principles and proper behaviour while using computers and other ICT equipment, in particular when using Internet services. | |
| **Information Security Manager** | Information security managers occupy the central position in a company in which leadership and technology competence are equally in demand. They are responsible for the establishment, implementation and continuous improvement of the Information Security Management System (ISMS) and act as an interface between the top management and the operating divisions. (Reference: http://at.cis-cert.com/Ausbildungen/Informationssicherheit/IS-Manager/Information-Security-Manager-ISO-27001.aspx, 27.12.2018) | Entrepreneurs, managers, decision makers, computer scientists, computer officers, IT experts and whoever is interested | • Knowledge about the basics of the information security system; • Skills of implementing the acquired technical knowledge in the company; • The ability to work in a team and to resolve conflicts; • • Knowledge of the basics of law. | Nationally and internationally recognized certificate "Information Security Manager in accordance with ISO / IEC 27001". |
| **Information Auditor** | The series of courses to the IS auditor is the ideal complement for trained IS managers. As an auditor, all internal audits can be carried out by themselves and the company prepared itself for external audits with the help of the course-mediated methods. The IS auditor in the company is the "supreme authority" for ISM systems. It assesses the information security to their conformity to standards and identifies potential improvements before a | Information Security Manager (To participate, a valid certificate as an IS manager is needed. In this way a high level of qualification of | • Acquainting with the provisions of the regulation on the protection of personal data; • Knowledge of how to adapt the organization to new regulations; • The ability to develop and implement an internal security policy; • The ability to assess risk; • The ability to solve typical problems related to personal data. | Nationally and internationally recognized certificate "Information Security Auditor for ISO / IEC 27001" |

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| | company will be certified with the CIS certificate for the best possible standard of safety according to ISO / IEC 27001 or given an extension. (Reference: http://at.cis-cert.com/Ausbildungen/ Informationssicherheit/IS-Auditor/Information-Security-Auditor-ISO-27001.aspx, 27.12.2018) | the auditors is ensured.) | |

## 2.2 Training Offers in Data Protection

| Name of Training Course | Main Content / Objective | Target Groups (basic /intermediate / proficient user) | Skills acquired (professional, social and transversal) | Kind of Testimonial |
|---|---|---|---|---|
| **Preparatory Training as a data protection officer** | With this seminar the skills necessary to master the future role as Data Protection Officer are obtained. All relevant legal and technical knowledge is provided and the goal of the seminar-workshop is to be "practical proof" in data protection . After the seminar one will have the ability to sense the data protection issues and to control them within the company. One has the communicative ability of the data protection rules to mediate in the company and one feels grown to the entire tasks of a Data Protection Officer. (Reference: http://www.kmu-plattform.eu/betrdaten.html, 12.12.2018) | Future data protection officers, engineers, lawyers, managers and interested parties who wish to obtain a thorough overview on the issue of data protection officer. | • Knowledge about the basics of data protection; • Knowledge of the basics of law. | Certificate of attendance |
| **Data protection officer** | SOUND LEGAL BASIS DATA PROTECTION OFFICER Forms of the DSB Internal or External? Role conflict with creation of systems? assignments DATA PROTECTION IN AUSTRIA Austrian Adaptation Act 2018 data protection authority DATA PROTECTION IN THE COMPANY Action plan and procedure | Corporate data protection officers, managing directors, heads and employees of IT departments, IT security officers, HR officers, compliance officers, works council members, consultants | • Legal knowledge on GDPR • Knowledge about role and responsibilities of an DPO • Knowledge on Risk management strategies • Ability to resolve conflicts of interest; | "Data Protection Officer" of Austrian Standards based on the international standard ISO/IEC 17024 |

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| | risk assessment<br>TECHNICAL AND ORGANISATIONAL MEASURES<br>(Reference: https://www.tectrain.at/seminare/themen , 10.01.2019) | | | |
| **Preparation for EU Data Protection Regulation** | Data protection is a fundamental right. For this reason, the basic EU data protection regulation describes obligations for companies. In this training to become a data protection officer, you will deal with the legal basis and legal necessities. What you can expect: Practical knowledge for setting up a legally compliant data protection management system.. (Reference: https://www.wifi.at/ 20.12.2018) | Decision-makers from business, public authorities, public corporations, employees in the fields of data processing, data protection and IT security, legal, auditing and controlling departments as well as personnel and organizational managers. | • data protection law<br>• Basic legal knowledge<br>• Data Protection Act DSG 2000, EU Data Protection Basic Regulation<br>• data security engineer<br>• Tasks, role, rights and obligations<br>• Statutory audit instruments<br>• New supervisory authority, etc.<br>• Implementation in the company<br>• Development of a data protection management system<br>• Introducing EU-DSGVO data protection standards, making default settings, identifying risks and vulnerabilities, impact assessment<br>• Rights and duties<br>• Information duties, accountability, rights of data subjects and their implementation<br>• Technical data protection and IT security<br>• Preferences, Privacy by Design and Privacy by Default,<br>• Contractual data protection | Data Protection Officer" of Austrian Standards based on the international standard ISO/IEC 17024 |

# 3 Lithuania

## 3.1 Training Offers in Information Security

| Name of Training Course | Target Groups (basic/ intermediate/ proficient user) | Skills acquired (professional, social and transversal) | Kind of Testimonial |
|---|---|---|---|
| Information security training | basic | Social/ professional | https://www.atea.lt/paslaugos/mokymai/informacijos-saugos-mokymai/ |
| Cyber security training | basic, intermediate/ proficient user | Professional, social and transversal | https://www.nrdcs.lt/lt/Paslaugos/mokymai-/7 |
| Information security training for non-professionals | basic, intermediate/ proficient user | Professional, social and transversal | http://www.kompetenc.lt/Inf.aps.mok.html |
| Basics of cyber security | proficient user (IT specialists) | Professional | https://www.cybersecurityacademy.lt/bazinis-kibernetinio-saugumo-kursas |
| Hack IT to Defend IT (L1) | proficient user (IT specialists) | Professional | https://www.cybersecurityacademy.lt/hack-it-to-defend-it |
| Hack IT to Defend IT (L2): web applications | proficient user (IT specialists) | Professional | https://www.cybersecurityacademy.lt/hack-it-to-defend-it-l2-web-apps |
| Ethical hacker practitioner (L3) | proficient user (IT specialists) | Professional | https://www.cybersecurityacademy.lt/etinis-hakeris-praktikas-l3 |
| Safe programming | proficient user (IT specialists) | Professional | https://www.cybersecurityacademy.lt/saugus-programavimas |
| IT security practitioner | proficient user (IT specialists) | Professional | https://www.cybersecurityacademy.lt/it-saugumo-praktikas |
| Information security practitioner | proficient user (IT specialists) | Professional | https://www.cybersecurityacademy.lt/informacijos-saugumo-praktikas |
| Cyber security incident management | proficient user (IT specialists) | Professional | https://www.cybersecurityacademy.lt/saugumo-incidenu-valdymas |
| IT security awareness training | proficient user (IT specialists) | Professional | https://www.cybersecurityacademy.lt/it-saugumo-mokymai-darbuotojams |

## 3.2 Training Offers in Data Protection

| Name of Training Course | Target Groups (basic/ intermediate/ proficient user) | Skills acquired (professional, social and transversal) | Kind of Testimonial |
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| Protection of personal data: GDPR requirements training | Proficient user | Professional | https://renginiai.kasvyksta.lt/56766/asmens-duomenu-apsauga-bdar-reikalavimu-mokymai |
| Protection of personal data and responsibility of GDPR violations | For Managers, Lawyers, Secretaries, Heads of Administration, Personnel Managers, Administrators | Social/ professional | http://www.auditorija.lt/mokymai-kursai/9577-asmens-duomenu-apsauga-bei-atsakomybe-uz-asmens-duomenu-teises-aktu-pazeidimus-isigaliojus-es-bendrajam-duomenu-apsaugos-reglamentui-bdar |
| Protection of personal data and violations of personal data legislation in 2018 | basic | Social/ professional | http://www.auditorija.lt/mokymai-kursai/9220-asmens-duomenu-apsauga-bei-atsakomybe-uz-asmens-duomenu-teises-aktu-pazeidimus-2018-m |
| GDPR | basic | Social/ professional | https://www.sabelija.lt/lt/paslaugos/435-seminaras-bendrasis-duomenu-apsaugos-reglamentas |

## 3.3 Higher Education Programs

| Study programme | Level | Aim | Institution |
|---|---|---|---|
| Information Systems and Cyber Security | BA | The study programme in Information Systems and Cyber Security aims to prepare professionals in information systems and cyber security who will have the fundamental and applied knowledge in informatics engineering and develop skills required for secure analysis, design, structuring and maintenance of information systems. | Vilnius University |
| Cybersecurity Management | MA | The Master in Cyber Security Management program is designed to train highly qualified professionals who understand, implement, deliver, manage and coordinate cyber security. Cyber security management is a special activity that requires highly qualified and interdisciplinary knowledge. The program has an interdisciplinary approach in order to understand and explore cyber security in a variety of aspects, from technical, managerial to legal. | Mykolas Romeris University |
| Information and Information Technology Security | MA | The Master's degree study programme is aimed at preparation of Masters who have the basics of cyber security theory, methods and technologies, knowledge of information security management and cyber space legal regulation, are able to work independently and with due qualification in the field of ensuring cyber security – to evaluate, design and implement | Kaunas University of Technology |

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| | | safe systems of information technologies and security management, solve security problems related to social engineering, plan and implement the continuation of activity and restoration of cyber systems. | |
| Information and Information Technologies Security | MA | The program aims at preparing highly qualified information and information technology security specialists, by forming the systematic view on root causes of information security issues, their prevention, solving and compensation methods, providing students with the newest knowledge and abilities from the professional and scientific point of view on modern information security insurance methods and technologies, developing original and critical thinking, managerial, research and innovation skills. | Vilnius TECH |

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# 4   Italy

## 4.1   Training Offers in Information Security

| Name of Training Course | Main Content / Objective | Target Groups (basic /intermediate / proficiant user) | Skills acquired (professional, social and transversal) | Kind of Testimonial |
|---|---|---|---|---|
| 1) "Higher training course in Information Security Management"; made by MIP Politecnico in Milan | Understand and evaluate the complexity of security issues that impact on corporate ICT, anticipating them with a proactive approach. Design, evaluate, implement and manage an Information Security Management System integrated with the company's core business, in accordance with the main reference standards, promoting effective management of known or foreseeable risks and anticipating the emergence of new ones. Estimate the costs and benefits of different solutions, evaluate the return on investment in security and understand the organizational implications of Information Security. | High level users: IT experts; cyber security experts; legal experts; ISO (Information Security Officers) | 1.   - Underlying technology & hot topics 2.   - Organization and management - Legal | Feedbacks from revious students (it is the 14th edition) |
| 2) „Information security" technical course; made by „Il Segno" training school | The course covers the main aspects related to this profession: designing secure computer networks, analyzing existing computer networks trying to identify any weaknesses, intervene in case of virus infections, estimate costs and recommend the adoption of particular procedures and software, configure and | Middle level users | Be able to handle technical and regulatory issues of considerable importance, in structures from the smallest to the most complex. | Feedbacks from revious students |

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| | manage firewalls, encryption programs, hardware components that improve security and much more. | | | |
| 3) „Information security" basic course; made by ADM Form | The growing use of the Internet and information technologies raises the problem of having to identify the security elements necessary for the performance of the profession, allowing the management of work in an immediate, safe and in full compliance with current regulations, especially with regard to privacy. The aim of the course is to outline the technical, legal and managerial aspects of security and privacy, as well as to provide some basic elements to manage these issues in the most effective way. | basic | be able to understand the Fundamentals of Information Security. be able to understand the Italian privacy law, the provisions of the Privacy Guarantor and the new European regulation. be able to understand the basic elements of telecommunication network security, the advantages of the cloud and security implications. basic knowledge of the ISO/IEC 27001 Information Security Management standard. | Feedbacks from revious students |
| 4) „Information security and Ethical Hacking" middle level course; made by Udemy | Online course guides students in the field of Information Security. This is one of the largest areas of technology to be covered since every system, network, program needs to be made secure today. That's why companies are always looking for qualified personnel and IT security professionals. This request is answered by Accademia Tomorrow with its online course. It is by following it that you will obtain the information on computer security necessary to become a Professional. With the online course you will | The course is addressed to graduates, graduates, technicians and enthusiasts who want to enrich their skills or embark on a career in ICT Security from scratch. | - Professions in Information Security - Types of Vulnerability - Kali Linux: The Hacker Operating System - Unix, Windows and Network Basics - Passive Discovery - Active Discovery - Sniffing & Password Cracking | Feedbacks from revious students |

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| | be able to become an Ethical Hacker, a professional figure today increasingly widespread that has a very varied and always updated knowledge of computer science. | | - Hacker Framework & Useful Resources<br>- Simulation of a computer attack on Windows<br>- Simulation of a computer attack on Linux | |
| 5) „Cybersecurity" course; made by Opificum Foundation | The CYBERSECURITY basic level course has the objective of framing the theme of information security from a regulatory and managerial point of view. | basic | Definitions and Italian context<br>Defense of cybernetic space<br> Regulations<br>The aspects of management and risk management (National Framework of CyberSecurity)<br>Basic technical aspects | Feedbacks from revious students |
| 6) „Master in Cybersecurity"; made by LUISS (business school) | Digital Transformation is an essential necessity for the continuous development of organizations and the country. However, it brings with it great technological, cultural and organisational changes that not only have a daily impact on users, businesses and national and international public administrations. Technological developments such as, for example, IoT, cloud, social, mobile are just some of the emerging issues that all public and private organizations have to deal with.<br>Digital Transformation therefore offers increasing opportunities to companies and organizational structures, which to be seized require the construction of adequate protection systems based not only on technological knowledge, but also on managerial, | The Master responds to the growing demands of the labor market in the public and private sectors of professional profiles specializing in cybersecurity that, in addition to an adequate knowledge of digital technologies, combine managerial, legal and economic skills. | • Cyberthreats<br>• Public governance of cybersecurity<br>• Italian policies and institutions<br>• European and international policies and institutions<br>• Cybercrime<br>• Digital Forensics<br>• Digital Privacy<br>• Regulation and Contract in Cybergovernance<br>• Enterprise cyberthreats<br>• Enterprise governance of cybersecurity<br>• Risk Management | Feedbacks from revious students |

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| | economic, legal and political knowledge and skills. In fact, in addition to the traditional threats coming from cyberspace, new, increasingly targeted, social and persistent methods of attack are being added. | | • Economics of Cybersecurity<br>• IT essentials<br>• Introduction to cybersecurity<br>• Networking essentials<br>• Cybersecurity essentials | |
| 7) „Information security" course; made by ESAC Vicenza | The primary objective of the course is to illustrate some important aspects to protect corporate privacy, taking into account the company's computerized management that increasingly concerns customer and supplier files, price lists and procedures. | Basic; It is addressed to all workers and to all those who want to deepen this issue. | security policy<br>Creation of robust passwords<br>Defend yourself from social engineering | Feedbacks from revious students |
| 8) „Information security" course; made by MAC Formazione Padova | The course Computer Security was born with the main objective of training an expert in cyber security able to create and monitor the right procedures to follow to avoid compromising sensitive data and / or blocking the daily work activities. | Basic; The objective of the course Computer Security in Padua is to transmit you the skills necessary to avoid computer attacks ensuring the necessary computer security of your company. | Email Security: Spam, Phishing, Malware, Cryptolocker etc...<br>Web Security: secure surfing, browser searches, bank fraud, etc...<br>Browser Security: which to choose, the plugin etc..<br>Passwords: definition of a password, unsafe passwords etc...<br>Antivirus: which to choose and how to configure it<br>Data backup and network protocols<br>Remote access | No |

| 9) „Information security in the companies" course; made by Dgroove Verona | Training course on Corporate Information Security<br>This course allows you to train experienced professionals, even with previous skills and significant seniority in information technology, sensitive and competent on issues of information security.<br>The introduction course to cybersecurity aims to train experienced professionals, even with previous skills and significant seniority in the field of information technology, sensitive and competent on issues of information security.<br>The technical expert in information security is the one who, knowing the areas and reasons with which computer attacks occur, is able to implement the appropriate defensive strategies for his company.<br>The analysis of the reasons for an attack is particularly important because it allows you to pick up warnings or interpret technical anomalies that would otherwise go unnoticed or almost unnoticed. | Middle level | Core business, operational and strategic activities for the company<br>Processes and procedures: daily work activity<br>IT, mobile and other technologies: how everyday depends on them<br>Integrated holistic view: examples of cross-dependencies<br>The role of people with respect to technologies<br>Objectives of an attack<br>The layered or onion safety model<br>Direct Attack<br>Use of systems as a bridge<br>The role of viruses<br>Stealing data (or money)<br>Stealing electronic identities<br>The denial of service and the cyber-return<br>Who are the attackers | Feedbacks from revious students |

## 4.2 Training Offers in Data Protection

| Name of Training Course | Main Content / Objective | Target Groups (basic /intermediate / proficiant user) | Skills acquired (professional, social and transversal) | Kind of Testimonial |
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| 1) „Data Protection Officer" course; made by ASSO DPO | The DATA PROTECTION OFFICER Advanced Specialization Course is aimed at training consultants and privacy representatives of companies in the public and private sector who intend to specialize in accordance with international standards of ISO standards, and in the future hold the role of "Data Protection Officer" or "Data Protection Officer". This new figure has taken on particular importance in the light of the approval of the European Regulation on data protection that unifies the Privacy legislation in the 27 EU member states. The role of the DPO may be covered by both internal employees and external consultants through a service contract. | Privacy contact persons (employees or consultants) who deal with the implementation of the Privacy Policy in companies; Data Protection Officers, Freelancers, Business Consultants, Compliance Officers, Corporate Law. | Several modules, that cover almost all the requested market competences | Feedbacks from revious students |
|---|---|---|---|---|
| 2) „Data Protection Officer" course; made by EUCS | The European Privacy Regulation expressly provides for the obligation for companies and public administrations to have their Data Protection Manager attend a periodic Privacy Officer Course in order to allow him to maintain his specialist knowledge in the field of privacy.<br><br>For this reason, EUCS has created a Data Protection Officer Privacy Course, updated to Legislative Decree 101/18, which allows you to acquire and maintain the specific skills to cover the role of DPO in the company and allows you | Public Administration (PA)<br>Healthcare and Social-Assistance<br>Financial, Banking and Insurance<br>School and Educational<br>Professionals (lawyers, accountants, labour consultants and notaries)<br>Information Technology, Web and Telecommunications<br>Trade, Distribution and Marketing<br>Tourism and Catering<br>Transport and Logistics | At the end of the specialized privacy training, your Data Protection Officer will have the legal, organizational and technological knowledge necessary to properly fulfill the role of Data Protection Officer.<br><br>The DPO course consists of a general module lasting a total of 32 hours and a series of advanced modules lasting 8 hours for each area of specialization chosen. | No |

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| | to obtain the International Certification of Data Protection Officer.<br><br>The Data Protection Manager Course is Certified and Personalized and can be done directly at your company's headquarters or attended in e-learning mode.<br><br>At the end of the specialized privacy training, your Data Protection Officer will have the legal, organizational and technological knowledge necessary to properly cover the role of Data Protection Officer. | Real Estate and Construction Production | | |
| 3) „Specialist training course for DPO"; made by Pegaso (on line University) | The main objective of the advanced training course for Data Protection Officers is to provide participants with the general knowledge and skills required to perform the role of Data Protection Officer (DPO) or Data Protection Officer (DPO), as required by EU Regulation 2016/679.<br><br>The DPO is designated on the basis of professional qualities, in particular specialist knowledge of data protection legislation and practices, and the ability to perform its tasks. This figure, of a high professional level, may be | For experts | Legal information technology<br>Administrative law<br>European Union law<br>Business Economics | Feedbacks from revious students |

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| | an employee of the data controller or of the data controller or fulfil his duties on the basis of a service contract and therefore may be a freelancer. | | | |
| 4) „On line Data Protection Officer" course; made by EI Pass | The DPO is a high-level professional figure who must be involved in all matters relating to the protection of personal data. He has a high degree of autonomy and is designated on the basis of his professional qualities. | Middle level | The training and certification course consists of the following modules:<br><br>The DPO: designation, position and tasks<br>New technologies: rights and damages<br>The Digital Administration Code and the latest updates<br>EU Regulation 679/2016 and the new rules on the protection of personal data<br>PEC, digital signature and archiving of digital documents<br>IT Security | Feedbacks from revious students |
| 5) „DPO and privacy officer" course; made by Bologna University | The course offers a training course that aims to:<br><br>- to train the new professional figure of the "Data Protection Officer" (DPO) or "Data Protection Officer" (DPO), institutionalized by the new EU regulation on the protection of personal data (GDPR, EU Regulation no. 679/2016), as well as other relevant figures (such as: the "Privacy Officer" or employee in charge of privacy | Graduates currently operating or aspiring to operate as "Data Protection Officers", as "Privacy Officers" (or privacy officers or privacy referents), as Consultants with expertise in the field of personal data protection.<br><br>Individuals who already operate or intend to operate in the areas of | Right to personal data protection and Data Protection Officer<br>Security measures, data breaches, investigative and web investigations<br>Corporate security, new technologies, impact assessment and application practices<br>Web society, web security, big data and privacy by design | |

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| | functions of companies or public bodies and the Manager of personal data);<br><br>- offer specific and interdisciplinary training in Data Protection and Privacy to those who already work or intend to work in the fields of privacy, corporate security and IT resource management in companies and public bodies, as an external consultant or as an internal expert. | privacy, corporate security and management of IT resources in companies and public bodies, as external consultants or as internal experts.<br><br>Managers or employees of the various company functions (human resources, IT managers, security managers, etc.) who intend to take care of the preparation in terms of personal data protection (privacy), as they are called upon to hold the role of "Managers of the processing of personal data". | | |
| 6) „DPO course"; made by Eduforma in Padua | The course will allow you to deepen your knowledge of EU legislation, cyber security and data protection, providing you with the skills you need to embark on the new profession of DPO. | The DPO studies the aspects inherent in the analysis of data and their processing from the computer, legal and organizational point of view. In addition, it analyses communication strategies to involve external and internal clients in data management. It applies problem solving strategies to the solution of managerial problems and, more | Module 1 - DATA MANAGEMENT ELEMENTS IN ORGANISATIONAL CONTEXTS (8 hours):<br><br>Elements of company organization: process analysis and graphic representation<br>Techniques for archiving company data: the document workflow<br>Characteristics of UNI standards (International standard)<br>Module 2 - NORMATIVE AND LEGISLATIVE ASPECTS ON DATA PROTECTION (48 hours): | Videos made by teachers and participants |

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| | | generally, to their use as a support to the management of privacy policies.

At the end of the course participants will have an adequate knowledge of the rules and practices of personal data management, including in terms of technical and organizational measures or measures to ensure the security of data in the company. | EU Data Protection Regulation 2016/679
Privacy Policy: Information, Consent and Management of Intellectual Property (IPR)
Violation of the rules: Information Offences, Sanctions and Protections
The national and international guarantee bodies and supervisory activities of the authorities
The role of the DPO in enterprises: supervisory information and audits
Risk management strategies and minimum data security measures at national and international level
Module 3 - DATA PROTECTION (24 hours):

Definition of Information Security: privacy by design and privacy by default
Methodologies for the analysis of cyber threats
Antivirus systems, Backup and disaster recovery systems
Definition of client/server concepts and methodology
How Network Protocols interact
Online publication of data and information | |
|---|---|---|---|---|
| 7) „Privacy governance: the dpo and other key roles" | The new Regulations, in Articles 35, 36 and 37, also define the role of the Data Protection Officer, who must be designated when: | Operators who perform the role of Privacy Manager, Data Protection Officer, IT Manager, Security | Several modules that cover all the issues and contents | Feedbacks from revious students |

| course; made by LUISS Business School | the processing is carried out by a public authority or body, with the exception of the courts;<br>the main activities of the Data Controller or Data Processor consist of processing operations which, by virtue of their nature, purpose and/or purpose, require regular and systematic monitoring of the persons concerned on a large scale;<br>The main activities of the Data Controller or Data Processor consist in the large-scale processing of special categories of data (sensitive data) and data relating to criminal convictions;<br>where provided for in Union law or in the law of the Member State, a group of undertakings may designate a single DPO provided that it is easily accessible by each establishment. Several public authorities or bodies may designate a single DPO, taking into account their structure and size.<br>In this new scenario, many companies, authorities and public bodies will have to adapt to the new regulations, assigning the function of "data protection officer" within their own structure or to external professionals, who, in | Manager, Compliance Officer, Privacy Auditor, Privacy Specialist;<br>Freelancers who carry out consultancy activities in the field of data protection;<br>All those who wish to enrich their portfolio of knowledge in the field of Privacy. | | |

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| | addition to a wealth of regulatory knowledge in the sector, will have to ensure advanced knowledge of security and information systems.<br><br>In addition, the UNI 11697/2017 standard has also outlined other profiles relating to the processing and protection of personal data, in order to better manage the governance of data protection.<br><br>The training course therefore aims to provide the basic knowledge relating also to the figure of the Manager, Auditor and Privacy Specialist. | | | |
| 8) „Privacy path: obligations, risks and opportunities for companies course"; made by CPV Foundation in Vicenza | The objective of the course is to provide guidelines for the correct application of the new privacy legislation at the company level, both to avoid the new penalties of up to 20 million euros and to reap the benefits in terms of company security, management and monitoring of workers.<br>The course is structured in three courses that can also be purchased individually. Each course specifically analyses different but complementary issues.<br>The course begins with an analysis of the differences and consequences at the company level of the new rules on privacy introduced by | The course is aimed at entrepreneurs and managers, privacy and compliance managers, personal, marketing and legal affairs managers, IT and security managers, personal data processors, professionals (lawyers, accountants, employment consultants, business consultants) | Several modules that cover all the issues and contents | No |

| | EU Regulation 2016/679 applied from 25 May 2018, which has changed the point of view on the protection of personal data, both with regard to the general principles and the rights of those concerned. | | |
| --- | --- | --- | --- |
| | A course will follow on a specific part of the new privacy regulations aimed at the protection of personal data. | | |
| | The course concludes with an analysis of the impact of the privacy discipline introduced by European Regulation 2016/679 with effect for workers. | | |

# 5   Poland

## 5.1   Training Offers in Information Security

| Name of Training Course | Main Content / Objective | Target Groups (basic /intermediate / proficiant user) | Skills acquired (professional, social and transversal) | Kind of Testimonial |
|---|---|---|---|---|
| n.a | | | • | |

## 5.2   HE Possibilities

| Study programme | Short description |
|---|---|
| Andrzej Frycz Modrzewski Kraków Academy of Technology | field of study: computer science and econometrics - 3.5 years, engineering, practical character<br><br>Graduates of computer science and econometrics are able to develop and implement IT systems, create computer graphics and manage websites. They are also familiar with issues related to information security. Thanks to the skills acquired during their studies, they can find employment in industrial, commercial and service companies, banks, insurance companies, tax offices or public institutions. |
| WSB Academy in Dąbrowa Górnicza, field of study: Information Security and Personal Data Protection, II degree, Master's degree | The aim of the specialization is to prepare graduates to perform the function of a Personal Data Protection Inspector (formerly ABI), fulfilling the knowledge requirements specified in the Personal Data Protection Act. The specialization prepares to work as a specialist in the field of information security, with particular emphasis on the challenges arising from the dynamic development of |

| | information technologies and in the field of managing and auditing the information security process in an organization. |
|---|---|
| Wyższa Szkoła Bankowa, field of study: Information security and cyberspace, bachelor's degree | Graduates acquire knowledge of developing and implementing procedures related to information and information systems security, are able to select compatible systems and configure security systems, know how to manage local and network systems, understand the operation of electronic signature, know elements of cryptography and network traffic monitoring. |
| Collegium Civitas, course: Inspector of Data Protection, post-graduate studies | Graduates know how to integrate personal data protection with the Information Security Management System (ISMS), learn the next steps related to personal data protection at the stage of designing IT systems, risk management methodology in personal data protection, and data protection impact assessment.<br><br>During practical classes they learn about the solutions for designing and implementing an Information Security Management System in an organization, necessary to achieve the assumed business goals, conduct a complete information risk analysis, and consequently also a data protection impact assessment (DPIA). |

## 5.3 Private Training Possibilitites

| Provider | Course Description |
|---|---|
| RODO ONLINE TRAINING | Compact training discussing key issues in the field of personal data protection and principles of data processing based on the current legal regulations. |
| RISK ANALYSIS AND DPIA | Training with workshop elements addressed to persons in charge of risk assessment and data protection impact assessment in the organisation |
| EITCSI Curses | courses with EITCI certificate cost approximately 1000 EUR |

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