



Ministero dell'Istruzione,  
dell'Università e della Ricerca

## EUROPASS DIPLOMA SUPPLEMENT



1 INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION		
1.1 / 1.2	Family Name / First Name	TUGNETTI SIMONE
1.3	Date, Place, Country of Birth	19/04/1997, BENTIVOGLIO BO ITALIA
1.4	Student Number or Code	TGNSMN97D19A785C
2 INFORMATION IDENTIFYING THE QUALIFICATION		
2.1	Name of Qualification (Full, Abbreviated)	Tecnico superiore per i metodi e le tecnologie per lo sviluppo di sistemi software – Web & Mobile App Development <i>Higher Technician for software system development methods and technologies – Web &amp; Mobile App Development</i>
	Name of Title (Full, Abbreviated)	Diploma di Tecnico Superiore <i>Higher Technician Diploma</i>
2.2	Main Field(s) of Study for the Qualification	Information and communication technologies (ICT) Software system development methods and technologies
2.3	Name of Institution Awarding Qualification Status (Type / Control)	Istituto Tecnico Industriale Statale "G.B. Pininfarina" <i>State Upper Secondary Industrial Technical Institute "G.B. Pininfarina"</i> Via Ponchielli 16 - 10024 Moncalieri (TO) Italy
2.4	Name of Institution Administering Studies Status (Type / Control)	Fondazione Istituto Tecnico Superiore per le tecnologie dell'informazione e della comunicazione (*) <i>Higher Technical Institute Foundation for information and communication technologies</i> Via Jacopo Durandi 10 - 10144 Torino (TO) Italy
2.5	Language(s) of Instruction / Examination	Italian, English

(\*) in this document, in short also: ITS ICT Foundation



<b>3 INFORMATION ON THE LEVEL OF THE QUALIFICATION</b>	
3.1	<i>Level of Qualification</i>
	EQF level 5, with reference to the four semesters ITS programmes (art. 1, paragraph 11, Inter-ministerial Decree nr. 713, September 16, 2016 - Guidelines issued in application of art. 1, paragraph 47, law nr. 107, July 13, 2015).
3.2	<i>Official Length of Programme</i>
	The pathway has an overall duration of 1,800 hours, subdivided as follows: - 1240 class hours - 560 traineeship hours
3.3	<i>Access Requirement(s)</i>
	Upper Secondary Education Degree or equivalent EQF4
<b>4 INFORMATION ON THE CONTENTS AND RESULTS GAINED</b>	
4.1	<p><b><u>Attendance modality</u></b>  Mandatory minimum attendance: 80% of the total 1800 hours  For the reference biennium, the Ministry of Education has announced that in consideration of the continuation of the Sars-Cov2 emergency, the attendance limit for admission to the competence verification tests is reduced to 70% minimum.  Lessons mainly in daytime hours</p> <p><b><u>Didactic methodology applied</u></b>  In order to contextualize the skills to real situations, in addition to established lecture, workshop and project work methodologies, the Higher Technician is put in a position to operate in learning situations mainly declined in the laboratory and in production activities, as in the experiences of the Special Technological Schools already well established in Europe. Therefore, educational methodologies have been developed and are applied that enhance know-how based competences, also by availing laboratories of partners and companies, to realize a strong integration between common and technical-professional competences in problem analysis, and in the management and control of equipment / services of the reference technical domain.  The methodologies used by the teachers to achieve the training objectives are described in the following.</p> <p><b>Alignment of competences:</b> at the course start, as well as during the delivery of content, the Foundation activates specific pathways, individual or group based, to provide for the realignment of skills within the whole class group.</p> <p><b>Case Study and Analysis:</b> a didactic method that offers the possibility to identify and diagnose the causes that have originated the event / case proposed, become aware of the problem, frame it in a context and hypothesize possible ways for a solution.</p> <p><b>Meetings with Sector professionals:</b> this methodology allows students to meet professionals of the reference sector and deepen knowledge related to their technical and professional profile, in terms of key resources (technical and relational skills, responsibility, role played etc).</p> <p><b>Problem setting:</b> this methodology aims to prepare students to handle problematic situations such as the acquisition of new notions or the solution of tasks, by developing a problem-oriented attitude.  Students are encouraged to transform an inconvenient situation in a well-defined problem, by setting the output (what you need to get) and the inputs (needed data and actions). Problem setting makes it important to define and manage the problem than searching for immediate solutions; in this sense, the methodology allows students to face problematic situations in different fields of study and in different work contexts.</p> <p><b>Role playing:</b> an active learning instrument that replies, in a classroom context, situations that are real or similar to those found in real life. The participants are assigned specific roles and are asked to hypothesize solutions to proposed problematic situations, on the basis of elements provided in advance.</p> <p><b>School-work alternation:</b> in addition to the provision of so-called common professional skills, the students are involved in real production activities, reporting directly to the client. The ways of involving students are substantiated through the development of different types of projects and methods: collective</p>

		<p>projects for large events, projects carried out within the framework of inter-institutional agreements with local institutions, initiatives that provide for the continuous supply of specific services, activities carried out within the framework of specific agreements with company partners interested in recruitment and hiring of students already in the course phase, projects carried out in the context of thematic competitions proposed by companies in the sector or by public entities.</p> <p>The active participation of companies within the training logic of the Foundation supports students in developing a greater awareness of their own predisposition and professional inclination, in learning the knowledge and skills essential to interact proactively within the reference economic fabric, in seizing concrete opportunities in which to put into practice the skills acquired during the training course.</p> <p><b>Integrated Laboratory:</b> The general objective of this Training Unit is to consolidate the technical skills acquired by the students during the course, experimenting processes and professional practices of the production sector of reference, through the development of a complex project of an interdisciplinary nature commissioned by a prestigious stakeholder of the local ICT sector. The students of three courses (Interaction &amp; Visual Design, Web &amp; Mobile App Developer, Integrated Backend Services) are involved in the realization of a common project starting from the design idea to get to the finished product, putting in each group the skills gained in the different paths.</p> <p>During the entire project cycle, each team is supported by a professional/teacher made available by the Foundation, with a technical and organizational mentoring role.</p> <p>The Project Mentors, in accordance with the Didactic Coordination, define the working groups and identify the team leaders (selected among the students of the Interaction and Visual Design course), that keep direct contact with the client and plan the development and delivery phases of the tasks assigned and agreed with the client.</p> <p>At the end of the course, the students will have experienced a real sharing of knowledge and will have had the opportunity to consolidate the theoretical notions belonging to the various training areas involved</p> <p><b>Social Hub:</b> through the wide potential offered by Internet, that allows to create virtual sharing spaces, the methodology aims at developing an actual learning community, by using IT support as a facilitator tool also for finding, deepening and sharing information. Thus, in addition to the traditional teacher-pupil model, a student peer-to-peer model is adopted.</p> <p>In particular, the online Google Education tools and the Moodle Platform are used.</p> <p>With the latter, each teacher organizes her/his teachings; the platform allows for communications publishing, discussion forums opening, share of study and insight material, insert exercises and requests for delivery checks, with subsequent real-time communication of the marks and comments on the documents. Besides, Moodle allows for constant monitoring of learning and class participation, and, for students', access to own course teaching materials and to freely communicate with own teachers and classmates.</p> <p>The ITS ICT Foundation itself monitors the teaching material used by each teacher, the progress of each Training Unit, and shares common documents for teachers and students.</p> <p>The Social Hub also includes Google Classroom, Calendar and Gmail applications</p>
4.2	<i>Programme Requirements</i>	<p>To access the final exam, students are required to attend at least 80% of the 1800 hours planned in the pathway and to obtain positive marks in all their classes.</p> <p>According to the national reference figure profile<sup>1</sup>, the Higher Technician for software systems development methods and technologies works to create and</p>

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		<p>manage the development of software systems. He/she intervenes on the processes of analysis, specification, development, testing and validation of products/services or ICT systems starting from the evaluation of the technical characteristics of the overall system up to the performance of the individual technological components. He/she uses techniques and methodologies for the installation, supervision and maintenance of these applications with reference also to systemic integration, network management, the implementation of updates and extensions, user support.</p> <p>The Higher Technician for software systems development methods and technologies owns the following macro-competences as a result:</p> <ul style="list-style-type: none"> <li>- plan the use of technologies and communication and evaluate their impact;</li> <li>- collaborate in the implementation of innovation projects life cycle, related to information and communication technologies</li> <li>- use methods and processes for the development of systems and applications</li> <li>- use languages for the realization of systems and applications</li> <li>- organize and use data, information and their aggregations;</li> <li>- develop multimedia and multi-channel interfaces;</li> <li>- make information, systems and applications accessible by differentiating the communication according to the recipients;</li> <li>- guarantee the safety and reliability of the service in compliance with sector regulations;</li> <li>- measure, evaluate and improve the level of service provided.</li> </ul> <p>With reference to Art. 2, paragraph 4 of the a.m. Inter-ministerial Decree Sept. 7, 2011, the figures are declined at a territorial level by the ITS Foundations, in relation to the specific skills and technological applications required by the world of work and professions, related to the specific needs of different situations and contexts.</p>
4.3	<i>Programme Details and the individual grades/marks/credits obtained</i>	<p>Attached to this document, the Final Certification prospectus lists the assessments achieved by the student in each individual subject of the two-year study plan, including the mark obtained during the curricular internship.</p> <p>If the student owns theoretical-practical skills acquired during previous completed studies, during work activities and / or with active participation in integrative projects carried out in synergy with the world of work that are significant with respect to the training path, the ITS ICT Foundation attributes training credits that can be used for total or partial exemption from the attendance of training units consistent with the skills acquired.</p> <p>The total credit hours awarded are reported in the attached Final Certification prospectus.</p>
4.4	<i>Grading Scheme, grade distribution guidance</i>	<p>Each subject includes a final assessment. If deemed necessary by the teacher and/or the Management, intermediate assessments are planned. The assessment is expressed as a mark in 30ths.</p> <p>The responsible of the training project, the classroom tutors and teachers detect through various monitoring tools the course of the teaching activity in relation to the class group, to assess:</p> <ul style="list-style-type: none"> <li>- students' skill and knowledge at the beginning of the two-year pathway. Competence mapping allows to assess which and how many students need to strengthen and enhance skills that are needed to ensure a homogeneous class management, followed by a design phase of solutions for innovations to be adopted to solve the criticalities highlighted;</li> </ul>

Inter-ministerial (Min. of Education, University and Research, Min. of Economic Development) Decree Sept.7, 2011, bearing general norms concerning the Higher Technical Institutes (ITS) and the related reference figures, and the assessment and certification of competences. The Higher Technician for software systems development methods and technologies professional figure is described in Annex F, Area 6 Information and communication technologies, 6.1. Software systems development methods and technologies, Professional figure description: 6.1.1

		<ul style="list-style-type: none"> <li>- ongoing competences and knowledge: systematic collation and interpretation of relevant information, allowing to evaluate if the student has reached an adequate level of competence during the course, in a specific activity field;</li> <li>- final competences and knowledge: the evaluation is carried out at the final exam, with reference to results obtained during the pathway and to the final test outcomes, with particular reference to the illustration of the project work developed during the traineeship, and to the results of the final test.</li> </ul>
4.5	<i>Overall Classification</i>	87/100, on 23/07/2020
<b>5 INFORMATION ON THE FUNCTION OF THE QUALIFICATION</b>		
5.1	<i>Access to Further Study</i>	The path allows access to further training study programmes.
5.2	<i>Professional Status</i>	<p>In accordance with Art. 7 of the Prime Ministerial Decree 25 January 2008, the cultural profile of the Higher Technician for software systems development methods and technologies makes reference to the ISCED 5 Level of the European Qualification Framework for Lifelong Learning (EQF); it is characterized by knowledge, specialist skills and professional competences enabling to act in production, management and control processes of goods and services, developed in technologically advanced work contexts.</p> <p>The two-year Web &amp; Mobile App Development course aims at training highly specialized designers in the development of mobile-apps and web-apps. The training course is designed with the aim of transmitting the technical skills necessary for the creation of a complete product, focusing on the front-end development component and on all the phases related to the creation of a product in the mobile and web domain.</p> <p>At the end of the course the student has the necessary skills and knows the most appropriate tools and methods to independently realize:</p> <ul style="list-style-type: none"> <li>- the project requirements analysis</li> <li>- the definition of a product starting from specific initial requirements</li> <li>- the design of the interaction between user and product</li> <li>- the project planning (project management)</li> <li>- the design of the graphic solution (for mobile apps or web-apps)</li> <li>- the usability analysis of the designed solutions</li> <li>- the design of the technological solution</li> <li>- the development of iOS and Android mobile applications</li> <li>- responsive websites optimized for mobile devices</li> <li>- the game development with the Unity technology</li> <li>- responsive websites optimized for mobile devices</li> <li>- the development of back-end components</li> <li>- the definition and use of databases</li> <li>- the publication of applications in the Android and iOS stores</li> <li>- digital marketing notions</li> <li>- the analysis of user behavior on digital products</li> <li>- the configuration and management of an e-commerce</li> </ul> <p>Furthermore, to meet technological needs across all areas and to complement specific technological skills, the Higher Technician is required to be able to:</p> <ul style="list-style-type: none"> <li>- have a systemic vision of the operational context, that make him/her aware of the problems to be faced in productive, organizational and service activities;</li> <li>- make use of language skills, with particular reference to the English language and to the use of the sector macro-language, that are needed to interact in the different work areas and contexts;</li> <li>- master specialist languages, application skills and the ability to adopt responsible and reliable behaviours, under the different profiles of production, work safety and environmental protection;</li> </ul>

- interact effectively with operators, technicians, professionals and managers in multi-competence working groups;
- acquire skills to relate effectively to the various figures operating in production and service value chains.

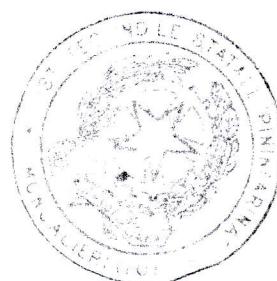
In the table below references are reported to the statistical classification systems of economic activities and professions, as well as to the professional areas, indicated for each national figure in Annex G of the Inter-ministerial Decree of Sept.7, 2011.

<b>6.1. Software systems development methods and technologies</b>	<b>6.1.1. Higher Technician for software systems development methods and technologies</b>	
<b>Professional area</b>	<b>Classification of professions</b>	<b>Classification of economic areas</b>
4) CULTURE, INFORMATION AND INFORMATION TECHNOLOGIES	3.1.2.1 – Software development technicians 3.1.2.2 – Application expert technicians 3.1.2.4 – Database management technicians	J 62 software production, IT consultancy and related activities  J 63 information services and other IT services

Recognition of the ITS diploma for the purpose of participating in the state exams for the exercise of the profession of agricultural technician, surveyor, agricultural expert and industrial expert is governed by paragraph 52 art. 1, Law 107/2015

## 6 ADDITIONAL INFORMATION

6.1	<i>Additional Information</i>	The student TUGNETTI SIMONE has carried out the traineeship with the company Ovolab srl, TORINO (TO) ITALIA with the task: ANDROID DEVELOPER The student has a deep knowledge in the design, development, and management of solutions for the organization and multichannel use of multimedia content.
6.2	<i>Additional Information Sources</i>	<p>For information and communications, please contact the ITS ICT Foundation:</p> <ul style="list-style-type: none"> <li>- phone +39 011 037 1500, Monday to Friday, 9.30 - 13.00 and 14.00 - 18.00</li> <li>- e-mail <a href="mailto:info@its-ictpiemonte.it">info@its-ictpiemonte.it</a></li> </ul> <p><i>Course coordination:</i> Federica Baroncelli                            <a href="mailto:federica.baroncelli@its-ictpiemonte.it">federica.baroncelli@its-ictpiemonte.it</a> Paola Tortoreti                                    <a href="mailto:paola.tortoreti@its-ictpiemonte.it">paola.tortoreti@its-ictpiemonte.it</a></p> <p><i>Director of the ITS ICT Foundation:</i> Giulio Genti                                        <a href="mailto:giulio.genti@its-ictpiemonte.it">giulio.genti@its-ictpiemonte.it</a></p>

7 CERTIFICATION OF THE SUPPLEMENT			
7.1	Date	18/03/2022	
7.2	Signature	 Prof. Anna Maria Poggi	 Dr. Lionella Favretto
7.3	Capacity	President Fondazione ITS ICT	School Manager Istituto Tecnico Pininfarina
7.4	Official Stamp/ Seal		

#### 8 INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

Description of the Italian Higher Education System	<p>The Italian system of Higher Education is made up of University education, Higher Level Arts and Music Education (AFAM) and Higher Technical Education (ITS). To enter any tertiary-level pathway it is necessary to hold a Diploma of upper secondary education.</p> <p>The Higher Technician Diploma is awarded at the end of a training course taking a total of 1800/2000 learning hours, after passing a final assessment of acquired competences.</p> <p>ITS pathways are linked to a defined range of high technology production areas, structured in sectorial fields. ITS represent the non-academic tertiary education and training segment, answering the enterprises' demand of technicians possessing new and high technological competences, and are able to promote innovation processes, and to manage and control organization and production processes.</p> <p>ITS courses refer their curricula to a set of national standards concerning:</p> <ul style="list-style-type: none"> <li>• linguistic, communication and relational, scientific, technological, legal and economic, organizational and managerial competences common to all the nationally-defined Higher Technician reference professional figures</li> <li>• technical-professional skills specific to each nationally-defined Higher Technician professional figure;</li> </ul> <p>ITS pathways are divided into Units, described as a meaningful set of competences which can be assessed autonomously, that are consistent with the learning outcomes approach.</p>
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## FINAL CERTIFICATION

COURSE: D68444-2-2018-0

Tecnico superiore per i metodi e le tecnologie per lo sviluppo di sistemi software –  
Web & Mobile app Development

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BIENNIO 2018-2020

DURATION 1800 HOURS

**TUGNETTI SIMONE**

Born in BENTIVOGLIO (BO) ITALIA on 19/04/1997

**Course attendance hours:** 97 % Attendance percentage

1731,5 Attendance hours

Sede legale

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### Results of the assessments by the teachers

Subject	Evaluation (marks/30)
Didactic insights	Not required
Guidance	Not required
Equal opportunities	Not required
Work safety	PASSED
Mobile and web application architectures	27
Copyright and legal rules of the digital world	18
E-commerce	25
Programming fundamentals	30
Database fundamentals	26
Gaming	27
English language	26
Interaction design and concept design	19

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Introduction to digital marketing	23
Project work preparation laboratory	29
Integrated laboratory	20
Project Management methodologies and tools	28
Android application programming	30
iOS application programming	27
Java programming	28
Node.js programming	28
Web programming – html and css	27
Web programming – javascript	27
Computer networks	30
Computer security	30
Web marketing tools	24
Server-side development	30
Visual design	30
Traineeship	29

***Formative credits awarded: 4***

Torino, 18/03/2022

The ITS ICT Directorship