

## Authors

|                     |                       |                |       |
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## Suitability of this case to the ApprEnt definition of HEA

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| Workplace/<br>training  | Mentoring   | Remuneration  | Formal<br>programme   | Certification   | Contract/<br>Agreement  |
|  |  |  |  |  |  |

## Evaluation of how the programme/practice reaches the following goals Scale: 1 = not at all; 2 = very little; 3 = somewhat; 4 = well; 5 = very well

|   | 1                        | 2                        | 3                                   | 4                                   | 5                                   |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| i. Enhances relevant working life skills and qualifications     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| ii. Promotes professional growth                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| iii. Develops learning environment practices as a whole         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| iv. Develops work-based learning practices and materials        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| v. Improves work performance                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| vi. Improves tutoring and mentoring practices                   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| vii. Enhances University-Business collaboration                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| viii. Showcases potential aspects for programme standardisation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

## Title

*I.T.S. for sustainable mobility*

## Description

### Model

**Type 3 apprenticeship: 'Apprenticeship for vocational qualifications and diplomas, upper secondary education diplomas and high technical specialisation certificates'.**

*This is for those aged 15 to 25 and may be applied to vocational education and training (VET) programmes at upper- and post-secondary levels.*

### Best practice

I.T.S. for sustainable mobility is configured according to the organisational model of the foundation, whose members – founders and participants – are the following: the Metropolitan City of Catania, the I.S.I.S. 'Duca degli Abruzzi' - Polytechnic University of the Sea of Catania, the ENN of Training DTN S.R.L., the University of Naples 'Parthenope' (NA), the Company NAUTICA GLEM, the Aeronautical Technical Institute 'A. Ferrarin' of Catania, the I.I.S.S. 'Nautico Gioeni-Trabia' (PA), the 'A. Rizza' (SR), I.S.I.S. 'Giorgio La Pira' of Pozzallo (RG), the Shipping Company CARONTE & TOURIST S.P.A., I.I.S.S. 'THE. Da Vinci'/M. Torre' (TP), I.I.S.S. 'S. Majorana' di Gela (CL) and the Company NICOLOSI TRASPORTI S.R.L.

#### Biennial postgraduate technical specialization courses

Since 2015, the ITS Mobility Foundation Sustainable Transport Catania provides biennial postgraduate technical specialisation courses in the technical area of sustainable mobility and transport for economic development and competitiveness, which lead to the Diploma of Higher Technician. This corresponds to the 5<sup>th</sup> level of the EQF (European Qualification Framework) and it is valid both at the national level and within the European Union, as it is accompanied by a supplement prepared according to the EUROPASS model. This supplement is issued by the Scholastic Institute of reference of the foundation, in this case the State Institute of Higher Education 'Duca degli Abruzzi' of Catania.

Each of the courses provided by the aforementioned ITS is aimed at 25 young people aged 18 and above and/or adults, Italian or other EU Member States' citizens, in possession of a Diploma of Higher Secondary Education, who have passed the selection test ascertaining their linguistic and computer skills as well as cultural and motivational level. There are currently three active pathways aimed respectively at training higher technicians for info-mobility and logistic structures, for the maintenance of means of transport and/or related infrastructures, or for the mobility of people and goods (maritime sector).

The courses aim at enhancing the resources of each student providing them with technical and technological skills, which encourage the further development of transversal and technical-professional skills. The learning methodology that characterizes them is based on operational methods of analysis, the development of application cases, analysis of concrete case studies, and the use of company data. The educational activities are divided into lectures, exercises, project works, guided tours and company internships. The work experience in the company takes place in the form of an apprenticeship, usually by stipulating a permanent contract with companies having specific agreements with the ITS Sustainable Mobility - Catania.

#### Training Institutions – Companies cooperation

The most important feature of these courses, in fact, is the active participation of companies in the teaching design, in the teaching activity (in fact, at least 50% of the teachers are employed in the companies involved) and in the hosting of trainees for long periods of training and project work. In this way, the correspondence between the skills required by the labour market and those provided

by the training path is guaranteed. Teaching planning, therefore, must involve both the employing company and the training institution, in order to allow the student to reach the set learning outcomes. Therefore, the figures of the training and company tutors, respectively identified by the training institution and by the company, are of fundamental importance because they accompany the apprentices along their paths: 1) the training tutor assists the apprentices in interacting with the training institution, draws up their PFI (Individual Training Plan), and monitors their progress by means of a triple evaluation (initial, intermediate, and final) of the apprenticeship period; 2) the company tutor, on the other hand, support the apprentices' job placement, guides their development of the skills necessary for performing the work activities, and provides the training institution with the elements to evaluate the activities carried out in the company.

### Structure of the ITS Courses

Specifically, the first two abovementioned ITS courses (higher technical training for info-mobility and logistic structures and higher technical training for the maintenance of means of transport and/or related infrastructures) last four semesters, for a total of 1800 hours, throughout which the apprentices take part in educational activities in classrooms and laboratories as well as in an internship period in the company. The support teachers enrich the teaching activities, which are also held in English, by organising group works often via multimedia and simulation platforms. On the other hand, the company internship, usually taking place between May and July, is arranged as a pre-introduction into the work environment. It ensures not only the application of the techniques learnt in the classroom but also the acquisition of empirical skills in the field by experimenting with approaches and tactics useful to deal with job responsibilities and duties.

The distribution of hours between the two branches of the Training Plan - internal and external training - can be modified for each ITS course, provided that the requirement of spending 30% of the training within the company is respected. The so-called 'internal training' (i.e. in the company) can be described as 'on-the-job' training, 'action learning' or 'individual training'; 'external training' (i.e. at the training institution) can be provided in the classroom, in the form of e-learning, or through individual and/or group training.

The course training for higher technicians for the production and maintenance of means of transport and/or related infrastructures establish 600 hours of lectures and 1200 hours of internship and project work. In the course training for higher technicians for info-mobility and logistic structures, the internship hours are instead 640. All activities are monitored through a register prepared by the training coordinator (the tutor appointed by the training institution), integrating the feedback on internal training received from the company tutor. In fact, the periodic assessment of the students' learning achievements is carried out via evaluation tests that lead the apprentices to the final examination, through which they can obtain their official qualifications. Thus, participating in educational activities is compulsory not only in the classroom and in the laboratory but also in the company, inasmuch as the admission to the aforementioned test requires the apprentices to attend at least 80% of the total learning hours.

To enrol for the ITS path for the mobility of people and goods, aspiring students must have obtained their Diploma at a Technical Institute for Transport and Logistics. In the event that they have obtained their secondary education qualification from another type of institution, such students are required to attend an alignment course. The programme lasts two-year and is divided into periods spent on the ground (for a total of 1200 hours) and boarding periods (for a total of 12 months). The boarding periods, the training periods on the ground, and the breaks in between are provided for and regulated by the employment contracts themselves. Throughout the on-the-ground training, students obtain international certifications on safety, develop the skills defined by national legislation, as well as those required by shipping companies, and focus in particular on the study of English. During the boarding period, they have numerous opportunities to enrich their professional experience, supported by the staff of the navigation company assigned to the tutoring. One of the main objectives of the boarding periods is to favour the mutual loyalty between the shipping company and the student, in order to favour direct employment once the training course has been completed. If the accumulated hours of absence do not exceed 10% of the path's total number of hours, the apprentices are admitted to the final exam taking place at the Port Authorities, through

which they can obtain the professional qualification of Officer.

#### Feedback from users

From the data collected through some interviews with the students completing their apprenticeship, their satisfaction for both their constant development (during which they are regularly supported by the training coordinator, whom they consider fundamental) and the results achieved seems clear.

In fact, most of the students, once they have completed the course, continue to work for the company where they have completed their internship. The students not only consider the path interesting, but above all concrete and with targeted objectives. What defines the ITS path is the transition from the learning phase to more practical activities in which the students will have to use the knowledge and skills acquired. Indeed, such transition appears so swift that they refer to their experience in the company as 'simultaneous' to their learning and training activities.

The ITS should not be seen as a long bridge leading the apprentices into the labour world, but an open door to start working for a company with a contract of apprenticeship training. This contract has a minimum duration of 12 months and, in most cases, the professional relationship is prolonged by ensuring a permanent contract to the apprentices immediately after they obtain the necessary qualifications. This prospect is highly motivating for the students, and drives them to greater commitment, attention, and sense of responsibility. Furthermore, not only the work experience of many of the teachers is essential but the role of the tutors also proves indispensable, since they help the students enter the labour world.

#### Relevance and Transferability

The cooperation model involving students, school teachers, and company tutors in co-planning activities could prove useful for HE apprenticeship. In fact, it encourages everyone to manage the programme's activities as well as to reflect upon the experience.

#### Comments

N/A