



# EC initiative on Curriculum Guidelines for KETs and AMT

High-level expert workshop on

## Future-Proofing Vocational Education for Manufacturing: Strategy, Collaboration Patterns and Learning Environment

17 September 2019 in Brussels

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# SKILLNET

the new EU funded Skillman's strategy to develop a large  
network of CoVE with Earlall, Cumulus, IVETA and Eapril





# SKILL MAN

> 350  
MEMBERS  
WORLDWIDE

Transnational platform of  
**Centres of Vocational Excellence**  
for the Advanced Manufacturing Sector

[skillman.eu](http://skillman.eu)

Giovanni Crisonà - [secretariat@skillman.eu](mailto:secretariat@skillman.eu)





**earlall**  
EUROPEAN ASSOCIATION OF REGIONAL & LOCAL  
AUTHORITIES FOR LIFELONG LEARNING



**eapril**

**model**

**values**

**tools**





**model**

**values**

**tools**



# HSEs

## High Skills ecosystems

worldwide  
distribution



EU Commission proposal for the next  
Erasmus programme 2021-2027  
includes to support  
**Platforms of Centres of  
Vocational Excellence**  
under the title of  
Partnerships for Excellence (KA2)

Economist David Finegold suggests that there are four elements required to create and sustain  
**high-skills ecosystems**  
*a catalyst, nourishment, a supportive host environment, and a high level of mutual interdependence*



education, culture, youth and sport: The Council adopts EU policy frameworks and work plans in these areas which set out the priorities for cooperation between member states and the Commission

+ rollout strategy  
at territorial level



## POLICY MAKING

influencing the VET policy agenda

## OPERATIONAL LEVEL

improving the quality and efficiency of VET





# > 350 Active Members



**National  
Coordinator**

**Area  
Coordinator**

**Editorial  
Board Member**

**Counselor**

**Ambassador**

**International  
Board Member**

model

values

tools





# SUSTAINABLE DEVELOPMENT GOALS



# Ethical Impact

## Skillman gives a sense to learning



**including the ethical  
values in the  
skills sets**

**leaving  
no one behind  
providing AM skills**





model

values

tools





# SCOUTING





## SOCIAL NETWORKING

<http://www.facebook.com>  
<http://www.linkedin.com>  
<http://www.plus.google.com>



## MICROBLOGGING

<http://www.twitter.com>  
<http://www.tumblr.com>  
<http://www.storify.com>



## PHOTO SHARING

<http://www.instagram.com>  
<http://www.flickr.com>  
<http://www.pinterest.com>



## VIDEO SHARING

<http://www.youtube.com>  
<http://www.vimeo.com>



## BLOGGING

<http://www.wordpress.com>  
<http://www.squarespace.com>  
<http://www.blogger.com>  
<http://www.movabletype.org>



## ANALYTICS

<http://www.tweetdeck.com>  
<http://www.hootsuite.com>  
<http://www.socialmention.com>

## STAKEHOLDERS



dissemination — Awareness

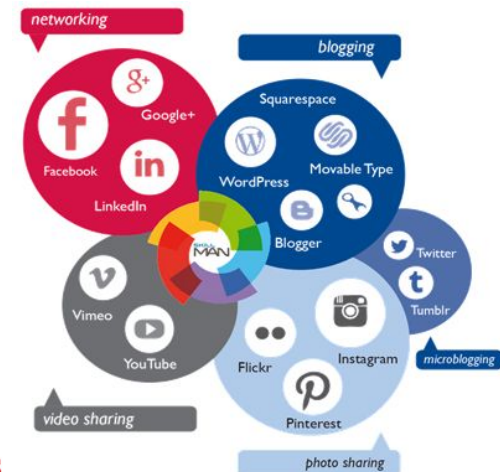
observatory — Interest

Skills Technology  
Foresight — Decision

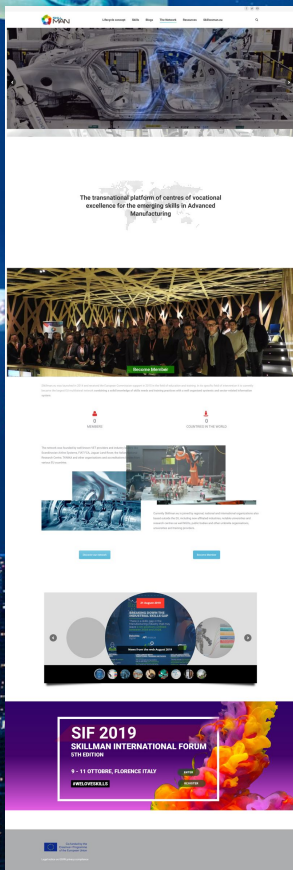
Action

LONG DURATION EFFECT

SKILLMAN.EU COMMUNITY FOR SKILLS INTELLIGENCE

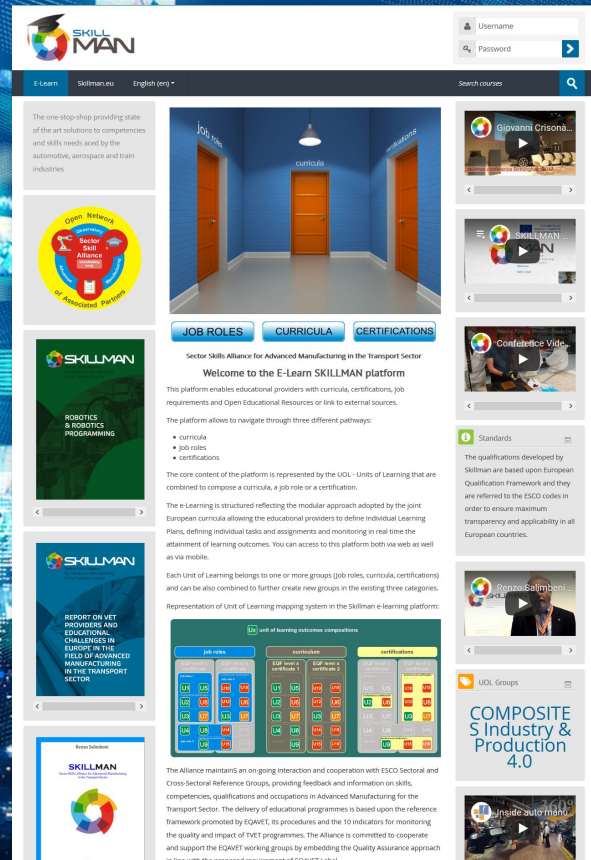






# skillman.eu

# learn.skillman.eu



**SKILLMAN**

E-Learn Skillman.eu English (en) +

Search courses

The one-stop-shop providing state of the art solutions to competencies and skills needs used by the automotive, aerospace and train industries

**Open Learning**  
Sector Skills Alliance  
Open Educational Resources

**JOB ROLES CURRICULA CERTIFICATIONS**

**Welcome to the E-Learn SKILLMAN platform**

This platform enables educational providers with curricula, certifications, job requirements and Open Educational Resources or link to external sources.

The platform allows to navigate through three different pathways:

- curricula
- job roles
- certifications

The core content of the platform is represented by the UOL - Units of Learning that are combined to compose a curricula, a job role or a certification.

The e-Learning is structured reflecting the modular approach adopted by the joint European curricula allowing the educational providers to define individual Learning Plans, defining individual tasks and assignments and monitoring in real time the attainment of learning outcomes. You can access to the platform both via web as well as via mobile.

Each Unit of Learning belongs to one or more groups (job roles, curricula, certifications) and can be also combined to further create new groups in the existing three categories.

Representation of Unit of Learning mapping system in the Skillman e-learning platform:

job roles			curricula		certifications	
UOL	UOL	UOL	UOL	UOL	UOL	UOL
UOL 1	UOL 2	UOL 3	UOL 1	UOL 2	UOL 3	UOL 4
UOL 4	UOL 5	UOL 6	UOL 1	UOL 2	UOL 3	UOL 4
UOL 7	UOL 8	UOL 9	UOL 1	UOL 2	UOL 3	UOL 4
UOL 10	UOL 11	UOL 12	UOL 1	UOL 2	UOL 3	UOL 4

**COMPOSITE S Industry & Production 4.0**

**Inside Automotive**

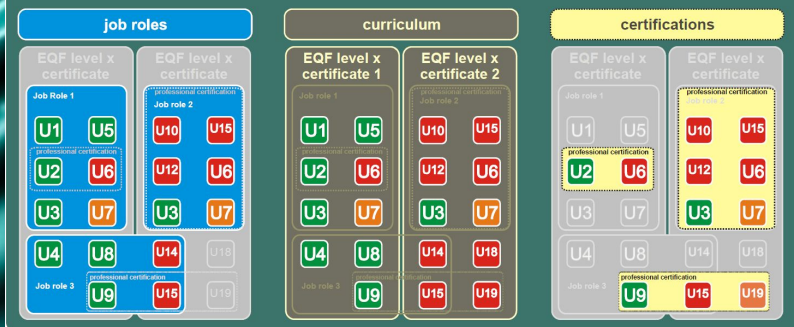


MARKETPLACE

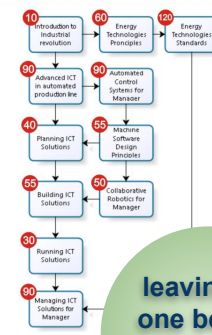
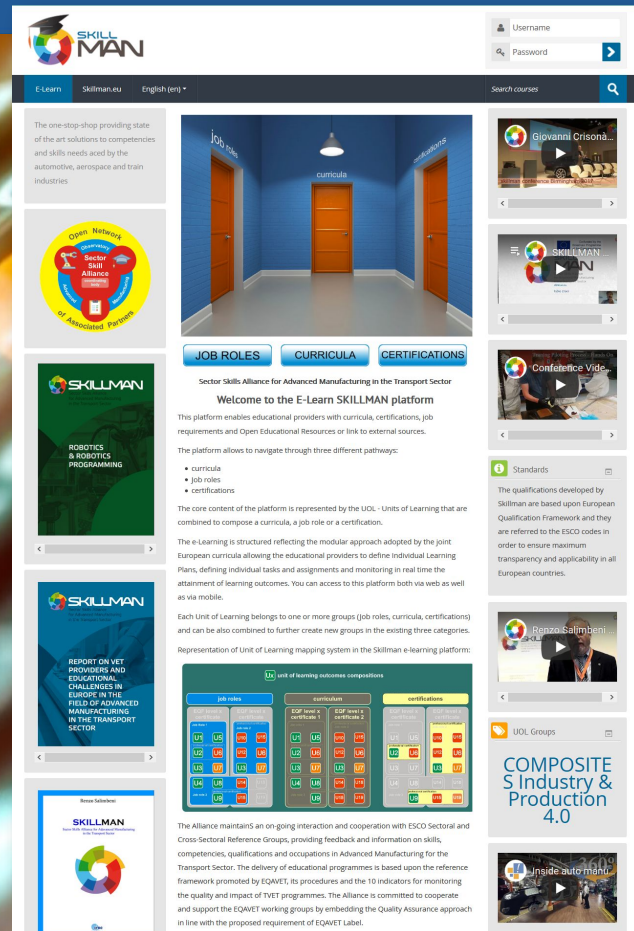
Exploitation opportunities

learn.skillman.eu

Ux unit of learning outcomes compositions



Industry &amp; production 4.0 Energy Manager | 640 hours

leaving no  
one behind  
providing  
AM skills


The screenshot displays the Skillman platform interface, which is a one-stop-shop providing state of the art solutions to competencies and skills needs across various industries. The platform is accessible via a web browser and offers a user-friendly interface for navigating through different pathways.

**Job Roles:** The platform allows users to navigate through three different pathways: curricula, job roles, and certifications. The core content of the platform is represented by the UOL - Units of Learning that are combined to compose a curricula, a job role or a certification.

**Curricula:** The platform is structured reflecting the modular approach adopted by the joint European curricula allowing the educational providers to define Individual Learning Plans, defining individual tasks and assignments and monitoring in real time the attainment of learning outcomes. You can access to this platform both via web as well as via mobile.

**Certifications:** Each Unit of Learning belongs to one or more groups (job roles, curricula, certifications) and can be also combined to further create new groups in the existing three categories. Representation of Unit of Learning mapping system in the Skillman e-learning platform.

**Standards:** The qualifications developed by Skillman are based upon European Qualification Framework and they are referred to the ESCO codes in order to ensure maximum transparency and applicability in all European countries.

**UOL Groups:** The platform maintains an on-going interaction and cooperation with ESCO Sectoral and Cross-Sector Reference Groups, providing feedback and information on skills, competencies, qualifications and occupations in Advanced Manufacturing for the Transport Sector. The delivery of educational programmes is based upon the reference framework promoted by EQAVET, its procedures and the 10 indicators for monitoring the quality and impact of TVET programmes. The Alliance is committed to cooperate and support the EQAVET working groups by embedding the Quality Assurance approach in line with the proposed requirement of EQAVET Label.

**800 recipients**  
**skillman newsletter**







## SUSTAINABLE DEVELOPMENT GOALS



# Ethical Skills Award

Skillman gives a sense to learning





4 thematic permanent groups

# PLCs

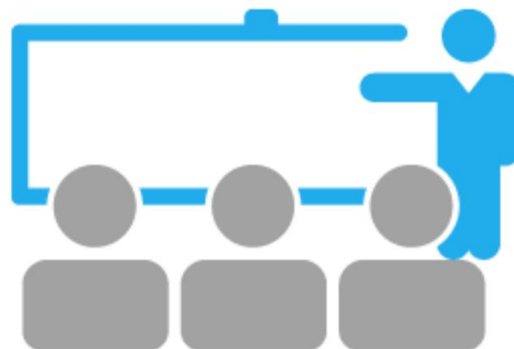
AM Sectoral dimension  
Advocacy & Policy Influencing  
WBL and standards  
Train the trainers

**2020 - 21****24 VET staff mobility****24 VET learners mobility****24 VET leaders mobility****36 org cooperation partnerships**





**2020 - 21**  
**36 webinars**

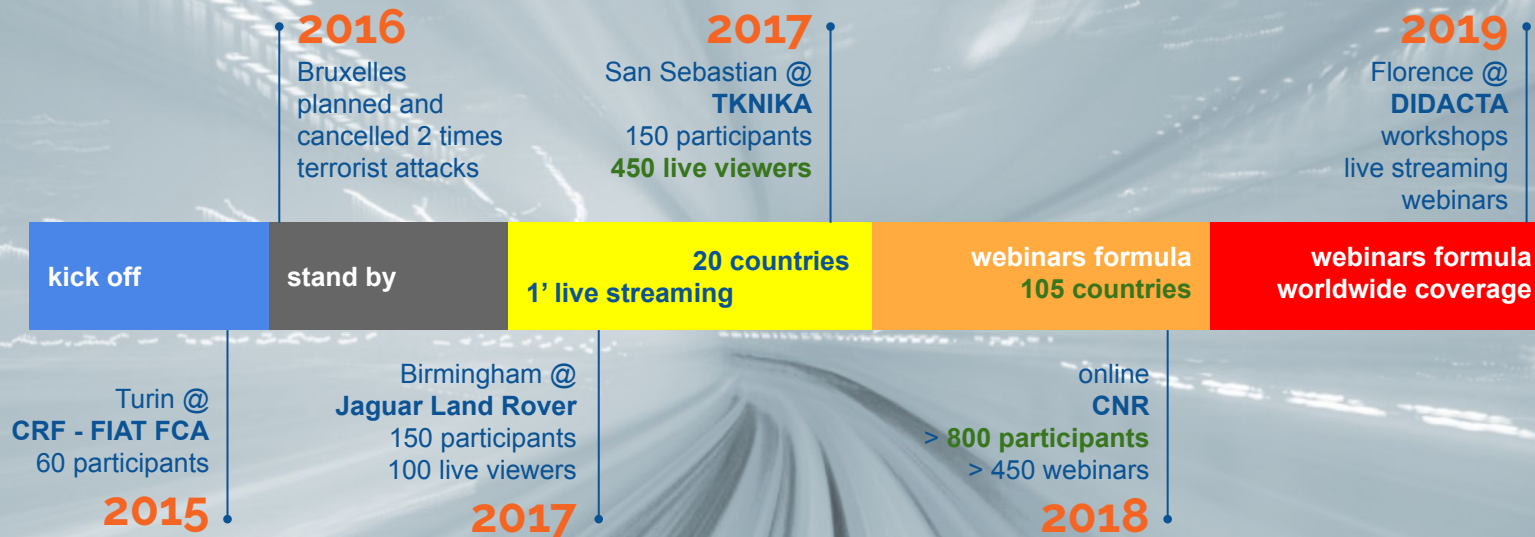


collection and circulation of relevant information on EU funds opportunities and procedures  
organising on site and distance trainings for the VET provider personnel to promote and foster  
the effective use of EU funding instruments

# SIF

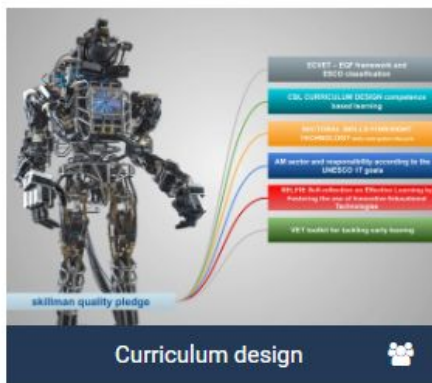
# SKILLMAN INTERNATIONAL FORUM







# SIF 2019 - SKILLMAN INTERNATIONAL FORUM







VET innovation café  
dissemination campaign  
32 VET innovation preparatory seminars

**FULLY INTEGRATED WITHIN THE  
EUROPEAN VOCATIONAL SKILLS WEEK**

tools



Co-funded by the  
Erasmus+ Programme  
of the European Union

INTERNATIONAL EVENT

EUROPEAN VOCATIONAL  
SKILLS WEEK

#DiscoverYourTalent

#EUVocationalSkills

SKILL  
MAN

Transnational platform of  
**Centres of Vocational Excellence**  
for the Advanced Manufacturing Sector

[skillman.eu](http://skillman.eu)

Labour  
Market and  
Skills  
Intelligence

© skillman.eu model

INNOVATION

Industrial Modernisation Platform

PROCESS

Regional  
Authorities

Industry

Cluster organisations,  
business networks, ...

European Strategic Cluster Partnership

TECHNOLOGY  
&  
SKILLS  
ANTICIPATION  
WAVE

go to market

go to LABOUR MARKET

SKILLS  
ENHANCEMENT

The Observatory

including  
the ethical  
values in  
the skills  
sets

# ESCO DB + ECVET + EQF STANDARDS = Curriculum template

**B. Curriculum template**

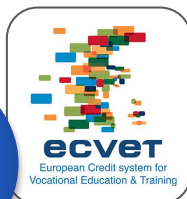
<b>Module</b>		<b>Learning outcome</b> Number and title	<b>1.1 Product and project planning</b>	<b>Assessment criteria</b> Description and timing
<b>Number and title</b>				
<b>Unit of learning</b> Number and title	<b>1. Planning ICT solutions</b>			<b>Qualifications framework</b> Reference to EQF and NVQ
<b>Duration</b> Hours				<b>Delivery methods</b>
<b>Number of ECVET Points</b> (if applicable)				
<b>Learning outcomes</b> Number and title	<b>Competences</b>	<b>Knowledge</b>	<b>Skills</b>	<b>Resources</b>
	<ol style="list-style-type: none"> <li>Analyses and defines current and target status.</li> <li>Estimates cost effectiveness, points of risk, opportunities, strengths and weaknesses, with related plans; establishes time scales and milestones, ensuring optimisation of resources.</li> <li>Manages change requests.</li> <li>Definition of quantity and provides an overview of additional documentation required for handling of products, including legal issues, in accordance with current regulations.</li> </ol>	<ol style="list-style-type: none"> <li>Identify all potential targets for service.</li> <li>Define the communication process and create related documents.</li> <li>Manage the change request process.</li> </ol>	<ol style="list-style-type: none"> <li>Identify all potential targets for service.</li> <li>Define the communication process and create related documents.</li> <li>Manage the change request process.</li> </ol>	<p>Reading materials:</p> <p>Websites:</p> <p>Videos and tutorials:</p>
<b>Assessment methods</b> (if applicable)				<b>Activities</b>
	<input type="checkbox"/> Written exercises and tests <input type="checkbox"/> Oral examination and exercises <input type="checkbox"/> Practical assignment under supervision <input type="checkbox"/> Practical assignment autonomously and responsibly <input type="checkbox"/> Other activities (please specify):			

**Ux unit of learning outcomes compositions**

job roles	curriculum	certifications
<b>EQF level x certificate</b> Job role 1: U1, U5, U2, U6, U3, U7, U4, U8, U9, U14, U16, U18 Job role 2: U10, U12, U6, U3, U7, U15, U19	<b>EQF level x certificate 1</b> Job role 1: U1, U5, U2, U6, U3, U7, U4, U8, U9, U14, U16, U18 Job role 2: U10, U12, U6, U3, U7, U15, U19	<b>EQF level x certificate</b> Job role 1: U1, U5, U2, U6, U3, U7, U4, U8, U9, U14, U16, U18 Job role 2: U10, U12, U6, U3, U7, U15, U19

UoL

## our STANDARDS

**EAfA****Digital Skills and  
Jobs Coalition****ECVET – EQF framework and  
ESCO classification****CBL CURRICULUM DESIGN**  
competence based learning**SECTORAL SKILLS FORESIGHT  
TECHNOLOGY** skills anticipation lifecycle**AM sector and responsibility  
according to the UNESCO 17 goals****SELFIE Self-reflection on Effective  
Learning by Fostering the use of  
Innovative Educational Technologies****VET toolkit for tackling early leaving**



## ESCO DB + ECVET + EQF STANDARDS = Curriculum template



unit of learning outcomes compositions

## job roles

EQF level x  
certificate

Job Role 1

U1

U5

U2

U6

U3

U7

U4

U8

EQF level x  
certificateprofessional certification  
Job role 2

U10

U15

U12

U6

U3

U7

U14

U18

Job role 3

U9

U15

U19

## curriculum

EQF level x  
certificate 1

Job role 1

U1

U5

U2

U6

U3

U7

U4

U8

Job role 3

U9

EQF level x  
certificate 2professional certification  
Job role 2

U10

U15

U12

U6

U3

U7

U14

U18

U15

U19

## certifications

EQF level x  
certificate

Job role 1

U1

U5

U2

U6

U3

U7

U4

U8

Job role 3

U9

EQF level x  
certificateprofessional certification  
Job role 2

U10

U15

U12

U6

U3

U7

U14

U18

U15

U19

B. Cu  
Mod  
Num  
Unit

Point

[to be specified]

Number of ECVET Points  
(if applicable)Learning outcomes  
Number and title

(3.1) Product and project planning

Competences:

1. Evaluate and define project and target status

2. Generate and effectively control the opportunities, strengths and

3. Analyse and evaluate the project, resources, time, costs and resources, and

4. Manage the project

5. Determine the quality and provide an overview of additional details

6. Implement the project and provide, including experience, in accordance

7. Implement the project and provide, including experience, in accordance

8. Implement the project and provide, including experience, in accordance

9. Implement the project and provide, including experience, in accordance

10. Implement the project and provide, including experience, in accordance

11. Implement the project and provide, including experience, in accordance

12. Implement the project and provide, including experience, in accordance

13. Implement the project and provide, including experience, in accordance

14. Implement the project and provide, including experience, in accordance

15. Implement the project and provide, including experience, in accordance

16. Implement the project and provide, including experience, in accordance

17. Implement the project and provide, including experience, in accordance

18. Implement the project and provide, including experience, in accordance

19. Implement the project and provide, including experience, in accordance

20. Implement the project and provide, including experience, in accordance

## ESCO DB + ECVET + EQF STANDARDS – Curriculum template



times compositions

um

certifications

EQF level x

certificate 2

U10 U15

U12 U6

U3 U7

U14 U18

U15 U19

EQF level x

certificate

U10 U15

U12 U6

U3 U7

U14 U18

U15 U19

B. Cu  
Mod  
Num  
Unit

Points

Unit	Specificity (level)
Number of ECVET Points (if applicable)	Specificity (level)
Learning outcomes (number and title)	Competences
1. Knowledge and understanding (for governance plans)	1. Identify all potential targets for the project or action
2. Basic decision-making methods	2. Identify the communication plan, identify key men and create relevant documentation
3. Skills, attitudes and competences	3. Manage the change request process
4. Skills, attitudes and competences	4. Manage the change request process
5. Skills, attitudes and competences	5. Manage the change request process
6. Skills, attitudes and competences	6. Manage the change request process
7. Skills, attitudes and competences	7. Manage the change request process
8. Skills, attitudes and competences	8. Manage the change request process
9. Skills, attitudes and competences	9. Manage the change request process
10. Skills, attitudes and competences	10. Manage the change request process
Assessment methods (if applicable)	Assessment methods (if applicable)
1. Written exercises and tests	1. Written exercises and tests
2. Oral examination and exercises	2. Oral examination and exercises
3. Practical assignments and supervision	3. Practical assignments and supervision
4. Practical assignments autonomously and independently	4. Practical assignments autonomously and independently
5. Other activities (please specify)	5. Other activities (please specify)

representations

case specify):





Skillman CoVE

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Centres of Vocational Excellence*

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