



DIGITAL TRANSFORMATION MANAGER

# PLATFORM OPERATION GUIDE

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## Structure of the course:

DITRAMA course is structured in two training paths. Each itinerary is available in each of the 7 languages of the project: English, French, Italian, Polish, Romanian, Spanish and Portuguese. Students can choose the itinerary and the language while completing the registration form.

Participants can find more information about the course in the following video:

<https://ditrama.eu/en/training-course>

The first path training path is aimed at Higher Education Students. This itinerary has a 5 EQF level and participants will accumulate 2.8 ECVET credits.



The complete course consists of **100 micro training pills grouped into 10 units** (4 technical and 6 transversal), that cover strategic as well as practical aspects.

1. Digital technology - exploration of contemporary emerging and potential disruptive technologies
2. Digital technology - engineering and manufacturing
3. Digital technology - simulation and AR/VR
4. Digital technology - data & security
5. Innovation and digital transformation
6. Leadership in digital transformation
7. Communication in digital transformation
8. The people within the digital transformation
9. Quality, risk and safety in digital transformation
10. Social and environmental impact of digitization
11. Final project (optional)



It has a duration of 70 hours and if the related tests are properly passed at the end of each unit, you will get the DITRAMA Certificate, proving you passed the course.

In this itinerary all pills are marked in the same red color:



|   |  |                          |
|---|--|--------------------------|
|  | Internet of Things - Emergence of Connected Economics                        | <input type="checkbox"/> |
|  | What is IoT/IIoT? General approach and platforms                             | <input type="checkbox"/> |
|  | IoT framework - Case study Tapio (HOMAG)                                     | <input type="checkbox"/> |
|  | Digital product configuration, selling, buying from a single platform (pCon) | <input type="checkbox"/> |
|  | Case study of One Two Time and Job registration by barcode scanning          | <input type="checkbox"/> |

The second itinerary is aimed at VET students and professionals from the furniture and wood sector. This itinerary has a 4 EQF level and participants will accumulate 1.4 ECVET credits.

In this second itinerary, students will be able to see the 100 pills that are part of the course, but to COMPLETE the course and to receive the diploma, students only have to complete 51 training pills grouped in 10 learning units.

In the second itinerary, students only have to complete the pills marked in red; the pills that are not mandatory are colored in green.

**Mandatory pills:**

|   |  |                          |
|---|--|--------------------------|
|  | Internet of Things - Emergence of Connected Economics                        | <input type="checkbox"/> |
|  | What is IoT/IIoT? General approach and platforms                             | <input type="checkbox"/> |
|  | IoT framework - Case study Tapio (HOMAG)                                     | <input type="checkbox"/> |
|  | Digital product configuration, selling, buying from a single platform (pCon) | <input type="checkbox"/> |
|  | Case study of One Two Time and Job registration by barcode scanning          | <input type="checkbox"/> |

Non-mandatory pills:



Internet of Things - Emergence of Connected Economic

The test available at the end of each learning unit will only contain questions related to mandatory pills.

The complete list of pills for each itinerary is available at the end of this Guideline as Annex I and Annex II.

Registered learners will be able to access all contents of the training course. In exchange for their free of charge participation to the course, learners **are required to complete three short evaluation surveys** that will help us to improve the course - at the beginning, in the middle and at the end of the course.



# Registering on the course

Students that have interest on enrolling on the online courses that DITRAMA project is offering, must register on the following URL:

<https://aula.ditrama.eu/register/>

Students will be asked to enter the following information:

- Name
- Surname
- Email address
- City
- Country

And from the list of available courses students can choose to enrol in any of the available courses in the language of their preference.

The system automatically generates a welcome email that sends the student to the email address indicated during registration; and in which the URL of the DITRAMA classroom, your username and the password to access it is indicated.

Students are advised to check their SPAM folders in case they don't receive the welcome e-mail and to contact the support team in case the problem persists.



# Access to the platform

Training activities will take place in an e-learning platform; available 24 hours a day and 7 days a week. Students will connect through the following website:

<https://aula.ditrama.eu/>

The main page will ask participants for their log-in information:

User

Password

Get in

Did you forget your username or password?

CAU (Customer Service Center)

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CENFIM Home & Contract furnishings cluster and innovation hub

AARHUS UNIVERSITY

WOODWIZE meet up again better

CETEM

UEA

AMIC

CFFIMM

FLA

ENGEL RUSPOK SAVA CPDA EXPERTISE CENTRE FOR PRODUCTION AND DESIGN

método

HO GENT

Universitatea Transilvania din Braşov

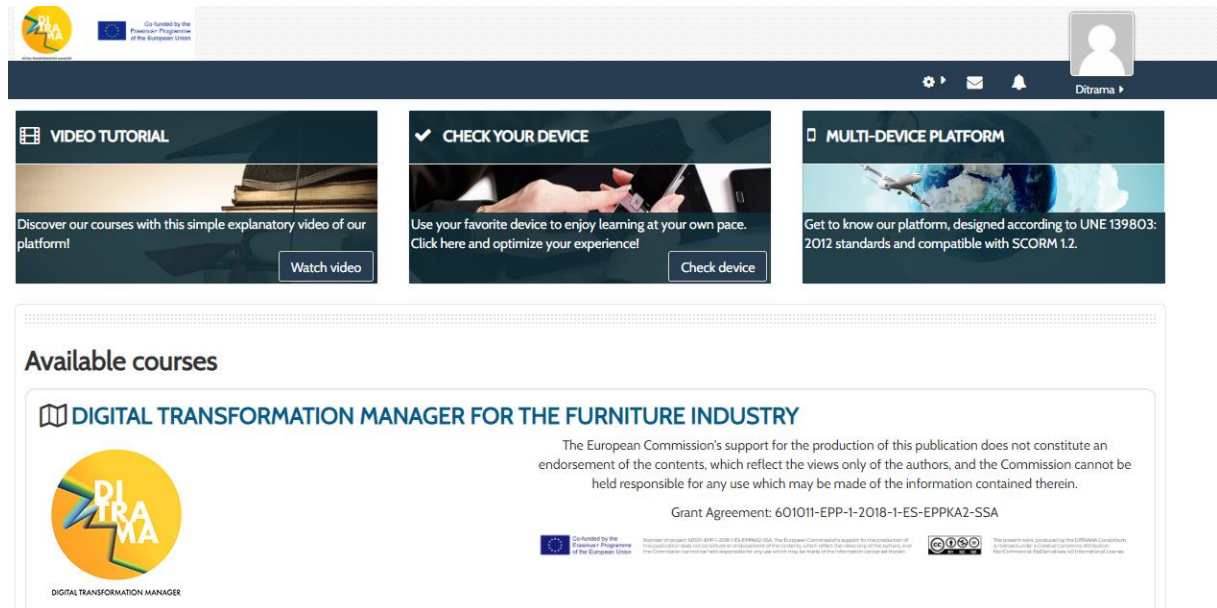
To access students must enter the user and password that have received by email.



# Access to the course

At the top of the screen students will find information about the user and they can edit their profile to put, for example, a photo.

At the bottom, they will find the course they are enrolled.



By clicking on the name of the course they will be able to access it.



# Structure of the platform:

## Central block

It is located in the central part of the screen and is organized in three tabs: Contents, Communications and Means.

### DIGITAL TRANSFORMATION MANAGER FOR THE FURNITURE INDUSTRY

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Announcements

Contents

Communications

Means

LU 1
LU 2
LU 3
LU 4
LU 5
LU 6
LU 7
LU 8
LU 9
LU 10

#### LEARNING UNIT 1: DIGITAL TECHNOLOGY - EXPLORATION OF CONTEMPORARY EMERGING AND POTENTIAL

Leveraging Maturity Models to promote Digital Transformation in the Furniture Industry

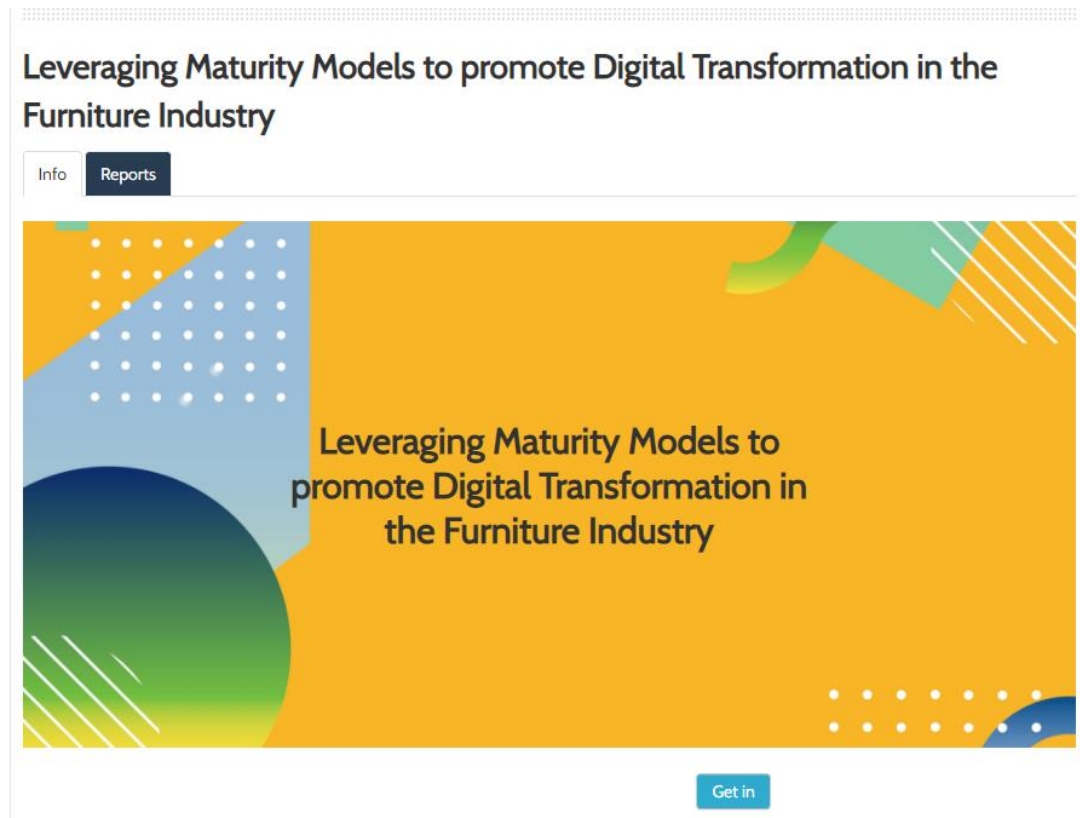
Strategy, Organizational Culture and People

## Contents

DITRAMA course is structured in 10 learning units; each of them containing several learning pills. By the end of each learning unit students will find an online test to check their knowledge gained during each learning unit.



Learning pills: they are the blocks marked in red, by clicking in each pill, participants will enter on the main screen of the pill.

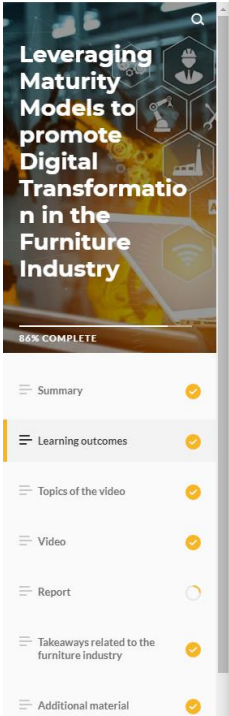


Participants have to click on Get In button, which will open an emergent screen with the content. They can navigate the content by clicking on each of the sections of the index or by clicking on next buttons.



|                       |   |
|-----------------------|---|
| ☰ Summary             | ✓ |
| ☰ Learning outcomes   | ✓ |
| ☰ Topics of the video | ✓ |
| ☰ Video               | ✓ |


Each time a part of the pill is completed, is marked in yellow, in order to allow participants to check their advance.



Lesson 2 of 7

## Learning outcomes

---



- ☐ **Digital Transformation Maturity Model**
- ☐ **Learn what is a Digital Transformation Maturity**

To facilitate the completion of the course, students may also follow their performance on the main page of the course, once a pill is completed a check mark appears on the list:

| LU 1  | LU 2   | LU 3 | LU 4 | LU 5 | LU 6 | LU 7 | LU 8 | LU 9 | LU 10                               |
|---|--|------|------|------|------|------|------|------|-------------------------------------|
| <b>LEARNING UNIT 1: DIGITAL TECHNOLOGY - EXPLORATION OF CONTEMPORARY EMERGING AND POTENTIAL</b> |  |      |      |      |      |      |      |      |                                     |
|              | Leveraging Maturity Models to promote Digital Transformation in the Furniture Industry |      |      |      |      |      |      |      | <input checked="" type="checkbox"/> |
|              | Strategy, Organizational Culture and People  |      |      |      |      |      |      |      | <input type="checkbox"/>            |
|              | Underpinning execution: ICT, standards and processes                                   |      |      |      |      |      |      |      | <input type="checkbox"/>            |

## Test

By the end of each learning unit, participants will find an online test composed by one question for each pill that is part of the learning unit. If the learning unit has 8 pills, the final test will have 8 questions. The evaluation mode will be made by multiple choice questions. For each question, there will be four (4) possible answers, and with one (1) correct answer.

## Certificate of completion

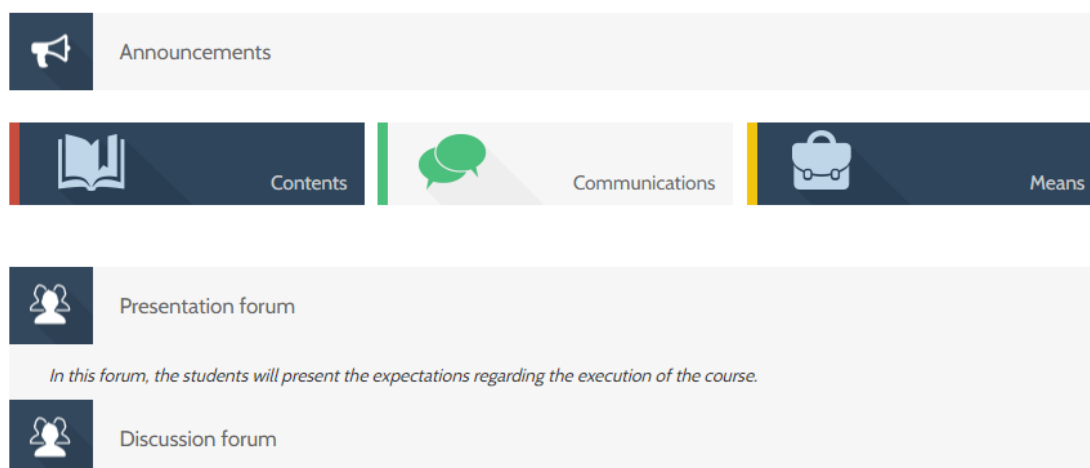
Students must answer correctly at least 50% of the answers to receive a certification of completion of the learning unit. The certificate will be available for downloading once the student pass the test. A downloading section will appear below the Test.

|   |  |
|---|--|
|  | Cloud computing explained in the context of Industry 4.0 |
|  | Test 1   |
|  | LU 1 certificate   |

## Communications

The communication section is divided in three sub-sections: announcements, presentation forum and discussion forum.





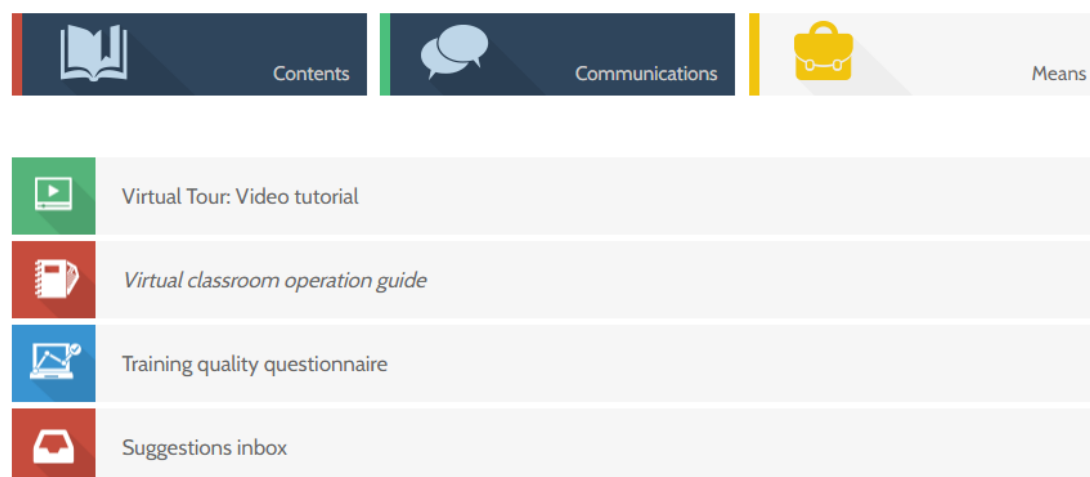
**Announcements:** only profiles with administration role can post in this section. Main announcements concerning the course will be posted there.

**Presentation forum:** students can post in this section to present themselves and their expectations of the course.

**Discussion forum:** in this section all participants can share news or matters of interest related to the course.

## Means

Within the "Means" tab, participants can access the suggestion box and other documentation linked to the functioning of the e-learning platform.



# Annex I: Itinerary 1 (EQF 5)

| <b>LU1: Digital technology - Exploration of contemporary emerging and potential disruptive technologies</b> |
|---|
| Internet of Things - Emergence of Connected Economics   |
| What is IoT/IIoT? General approach and platforms  |
| IoT framework - Case study Tapio (HOMAG)  |
| Digital product configuration, selling, buying from a single platform (pCon)                                |
| Case study of One Two Time and Job registration by barcode scanning   |
| Cloud Computing – Enabling Industries of the Future   |
| Cloud computing explained in the context of Industry 4.0  |
| <b>LU2: Digital technology - engineering and manufacturing</b>  |
| Technical General Competences   |
| Horizontal and Vertical System Integration  |
| A brief history on the first, second and third industrial revolution  |
| Industry 4.0  |
| ERP Introduction  |
| Case study of Proteus® ERP  |
| Operational Resource Planning Case study - ARDIS®   |
| Review of parametric design software for Industry 4.0   |
| Case study: Imos as customized design software  |
| Case study: Inventor software (applied in Nord Arin S.A Co.)  |
| CADCAM Case study -TopSolid   |
| CAD-CAM system Industry 4.0 Case study - Cabinet Vision   |
| CAD-CAM Case study - bCabinet (Biesse)  |
| Additive Manufacturing Introduction   |
| Additive Manufacturing Overview   |
| Additive Manufacturing Examples from the furniture sector   |
| Autonomous Robots - An Introduction   |
| Autonomous robots - Case study: Lesta robots for furniture finishing  |
| <b>LU3: Digital technology – simulation and AR/VR</b>   |
| Establishing Digital Twins for Cyber-Physical Systems   |
| Case study - bSolid (Biesse)  |
| CAD-CAM-CAE - Sophia platform   |
| Visualization of the design   |
| Augmented Reality & Artificial Intelligence   |
| Augmented Reality - General concepts and applications   |
| Case study - design pCon digital platform   |
| Using AR/VR in sales  |





|  |
|--|
| Remote technician and operator training by AR/VR   |
| <b>LU4: Digital technology – data &amp; security</b>   |
| New ways of collecting and moving data - digital platforms                                     |
| Tools for Understanding and Monetizing Data  |
| Big Data analytics & advanced analytics  |
| LEAN and Digital Manufacturing “Total Production Maintenance” TPM                              |
| LEAN and Digital Manufacturing SMED  |
| Big data analytics and evaluation of customer experience                                       |
| Cybersecurity Introduction – backing up your data might not be enough                          |
| A strategy for cybersecurity: how to protect your digital assets                               |
| Cybersecurity (internally in the firm)   |
| GDPR and Safety - General Data Protection Regulation   |
| Blockchain - a changing trend for industries and what does it mean for your business           |
| Machine Learning in the furniture industry   |
| <b>LU5: Innovation and digital transformation</b>  |
| Understanding the Digital Ecosystem  |
| Managing innovation processes and tools to drive digitalization                                |
| Ability to sense the opportunities within digitalization                                       |
| New (Digital) Business Models  |
| Value generation   |
| Introduction to Digital Transformation   |
| What is Digital Maturity?  |
| Designing the Digital Strategy   |
| Moving from Supply Chain to Ecosystems   |
| Moving from Products to Services: New Value Propositions                                       |
| Understanding the Market / Technical Trend and the Competition to Fit in the Digital Ecosystem |
| <b>LU6: Leadership in digital transformation</b>   |
| Investing for Digital Transformation: The Business Case  |
| Related to business concepts (i.e. investments)  |
| Leveraging Maturity Models to promote Digital Transformation in the Furniture Industry         |
| Digital Adoption: What, why and how  |
| Strategy, Organizational Culture and People  |
| Underpinning execution: ICT, standards and processes   |
| Reorienting the company around the Customer Experience to generate business value              |
| Embracing constant change and rapid adaptation to generate business value                      |
| Examples of Digital Transformation Enablers and Tools  |
| Self-assessment exploratory questions  |
| Evaluation Tools - How digitally mature is your company?                                       |
| Furniture Manufacturing Industry: Current Status   |
| Advancement of the Digital Maturity of Furniture Manufacturing Companies                       |
| <b>LU7: Communication in digital transformation</b>  |





|  |
|--|
| Digitalization: Opportunity or Threat                                      |
| Communicating the Digital Change in the Company                            |
| How to create partnerships in a digital ecosystem                          |
| LEAN and Digital enabled Supply Chain/Logistic                             |
| The Financial Perspective for Digital Commerce                             |
| Delivering Digital versions of the furniture/products (e-commerce) - Intro |
| New customer touch points  |
| E-marketing and (mobile) branding  |
| How to understand “your” market  |
| Brands & Patents - Intellectual Property Rights                            |
| <b>LU8: The people within the digital transformation</b>                   |
| Digital HR Practices   |
| Getting the right Employees: Hiring & training                             |
| Assessing the need for organizational change                               |
| Managing the organizational change   |
| Change of Culture and Mindset in the Company                               |
| Change of culture and mindset in the company. Case study - Van Hoecke      |
| <b>LU9: Quality, risk and safety in digital transformation</b>             |
| Automating tasks performed by human vision - Case study: TrackTech         |
| Digitalization of Organizational Processes                                 |
| From an Analog Safety Management System to a Digital System?               |
| Ecosystems and transactions: security implications                         |
| Intro to Risk management in the Digital area                               |
| A vision for the Digital risk: the seven building blocks                   |
| Implementing a Digital Strategy with Respect to Safety                     |
| Prevention Policy, Risk Assessment   |
| <b>LU10: Social and environmental impact of digitization</b>               |
| Digital Transformation - The Good, Bad & Ugly                              |
| Digital tools in times of emergency - Covid 19                             |
| Digital tools in times of emergency - Covid 19 (part 2)                    |
| Connecting Sustainability with Digitalization                              |
| How ‘servitization’ facilitates for longer lifetime of products            |
| Full cycle reusability of the Products                                     |



## Annex II: Itinerary 2 (EQF 4)

| <b>LU1: Digital technology - Exploration of contemporary emerging and potential disruptive technologies</b> |
|---|
| Internet of Things - Emergence of Connected Economics   |
| What is IoT/IIoT? General approach and platforms  |
| IoT framework - Case study Tapio (HOMAG)  |
| Case study of One Two Time and Job registration by barcode scanning   |
| Cloud Computing – Enabling Industries of the Future   |
| Cloud computing explained in the context of Industry 4.0  |
| <b>LU2: Digital technology - engineering and manufacturing</b>  |
| Technical General Competences   |
| Horizontal and Vertical System Integration  |
| A brief history on the first, second and third industrial revolution  |
| Industry 4.0  |
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| Operational Resource Planning Case study - ARDIS®   |
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| Case study: Imos as customized design software  |
| CAD-CAM system Industry 4.0 Case study - Cabinet Vision   |
| Additive Manufacturing Introduction   |
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| Case study - bSolid (Biesse)  |
| Visualization of the design   |
| Augmented Reality - General concepts and applications   |
| Case study - design pCon digital platform   |
| Remote technician and operator training by AR/VR  |
| <b>LU4: Digital technology – data &amp; security</b>  |
| New ways of collecting and moving data - digital platforms  |
| Cybersecurity Introduction – backing up your data might not be enough                                       |
| Cybersecurity (internally in the firm)  |
| GDPR and Safety - General Data Protection Regulation  |
| <b>LU5: Innovation and digital transformation</b>   |
| Understanding the Digital Ecosystem   |
| Managing innovation processes and tools to drive digitalization   |
| Ability to sense the opportunities within digitalization  |
| New (Digital) Business Models   |



|  |
|--|
| Introduction to Digital Transformation                                     |
| What is Digital Maturity?  |
| <b>LU6: Leadership in digital transformation</b>                           |
| Investing for Digital Transformation: The Business Case                    |
| Digital Adoption: What, why and how  |
| Underpinning execution: ICT, standards and processes                       |
| Embracing constant change and rapid adaptation to generate business value  |
| Examples of Digital Transformation Enablers and Tools                      |
| Self-assessment exploratory questions                                      |
| Advancement of the Digital Maturity of Furniture Manufacturing Companies   |
| <b>LU7: Communication in digital transformation</b>                        |
| Digitalization: Opportunity or Threat                                      |
| Communicating the Digital Change in the Company                            |
| Delivering Digital versions of the furniture/products (e-commerce) - Intro |
| <b>LU8: The people within the digital transformation</b>                   |
| Change of culture and mindset in the company. Case study - Van Hoecke      |
| <b>LU9: Quality, risk and safety in digital transformation</b>             |
| Automating tasks performed by human vision - Case study: TrackTech         |
| Digitalization of Organizational Processes                                 |
| Implementing a Digital Strategy with Respect to Safety                     |
| <b>LU10: Social and environmental impact of digitization</b>               |
| Digital Transformation - The Good, Bad & Ugly                              |
| Digital tools in times of emergency - Covid 19                             |
| Connecting Sustainability with Digitalization                              |
| Full cycle reusability of the Products                                     |





DIGITAL TRANSFORMATION MANAGER

Leading companies in Furniture value chain to implement their digital transformation strategy

# [www.ditrama.eu](http://www.ditrama.eu)

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naait op eigen houtje  
vous allez envoyer du bois

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