



ACCESSING THE ONLINE TRAINING COURSE

HELENA ARRAND | UNIVERSITY OF NOTTINGHAM



training.digit-t.eu

FINDING THE COURSE



The screenshot shows a web browser window with the Digit-T website. The browser's address bar shows 'digit-t.eu'. The website header features the Digit-T logo on the left and a navigation menu on the right. The 'TRAINING COURSE' link is circled in red, with an 'Access Course' button next to it. Below the header is a blue navigation bar with links for 'Home', 'e-Book', 'Resources', 'News & Events', and 'Contact'. The main content area features a large image of a hand holding a camera lens, with a scenic view of a lake and mountains visible through the lens. Below the image, the text 'DIGITAL MANUFACTURING TRAINING' is displayed in large blue letters, followed by a smaller line of text: 'Find out more about the Digit-T project and our free online training course and e-book.'

Creating a new account

FINDING THE COURSE

A screenshot of a web browser showing the Digit-T login page. The browser's address bar displays "training.digit-t.eu". The page header includes the Digit-T logo and a navigation menu with links like "University web site", "Campus News", "University Email", "Your IT Services", "Login - Jobs at the...", "Menu - Unit4 Busin...", "Staff Wellbeing Too...", "EDI", "Events - Royal Acad...", and "Mobility Tool+". The main content area has a dark blue background with a night-time industrial scene. On the left, the text "Digit-T" and "DIGITAL MANUFACTURING TRAINING" is displayed. On the right, a white login box titled "Access to the platform" contains fields for "Username" and "Password", a "Log in" button, a link for "Forgotten your username or password?", and a "New account" button.

Digit-T
DIGITAL MANUFACTURING TRAINING

Access to the platform

Username

Username

Password

Password

Log in

Forgotten your username or password?

New account



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CREATING A NEW ACCOUNT IS SIMPLE



New account

training.digit-t.eu/login/signup.php?

University web site Campus News University Email Your IT Services Login - Jobs at the... Menu - Unit4 Busin... Staff Wellbeing Too... EDI Events - Royal Acad... Mobility Tool+

 **Digit-T**
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New account [Expand all](#)

▼ Choose your username and password

Username ⓘ

The password must have at least 8 characters, at least 1 digit(s), at least 1 lower case letter(s), at least 1 upper case letter(s), at least 1 non-alphanumeric character(s) such as as *, -, or #

Password ⓘ

► More details

► Additional information

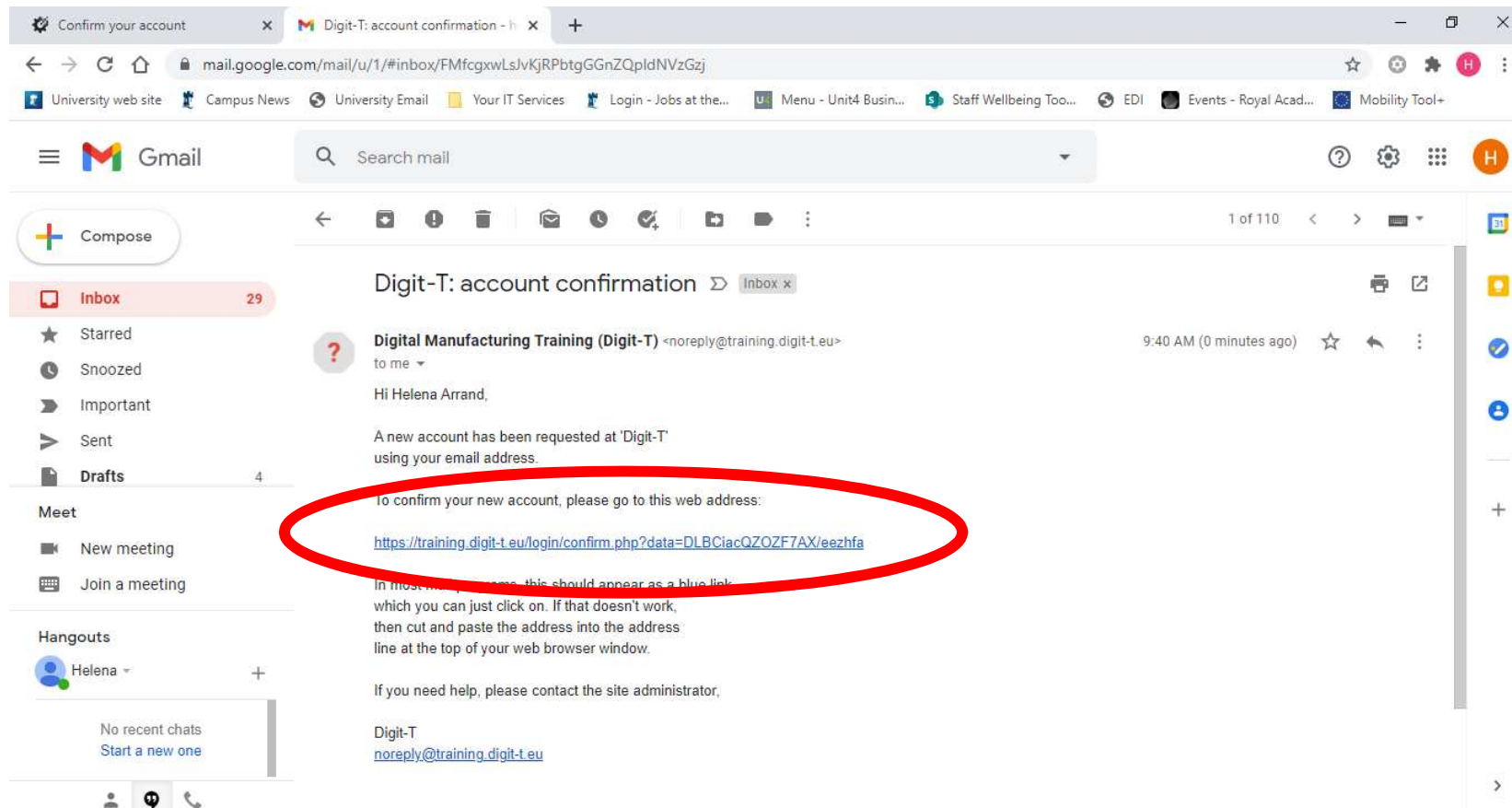


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CONFIRM YOUR ACCOUNT IN THE EMAIL SENT TO YOU



YOUR REGISTRATION IS NOW COMPLETE



A screenshot of a web browser showing the Digit-T registration confirmation page. The browser's address bar displays the URL "training.digit-t.eu/login/confirm.php?data=DLBCiacQZOZF7AX/eezhfa". The page features a blue sidebar on the left with a menu containing "Home" and "Dashboard". The main content area has a white background with a blue header bar containing the Digit-T logo. Below the header, a large white box contains the text "Digit-T" and a blue button labeled "Home" followed by the text "Your registration has been confirmed". Below this, another white box contains the text "Thanks, Helena Arrand" and "Your registration has been confirmed", with a grey "Continue" button. At the bottom, there is a section titled "Stay in touch" with the Digit-T logo and the URL "https://www.digit-t.eu/".



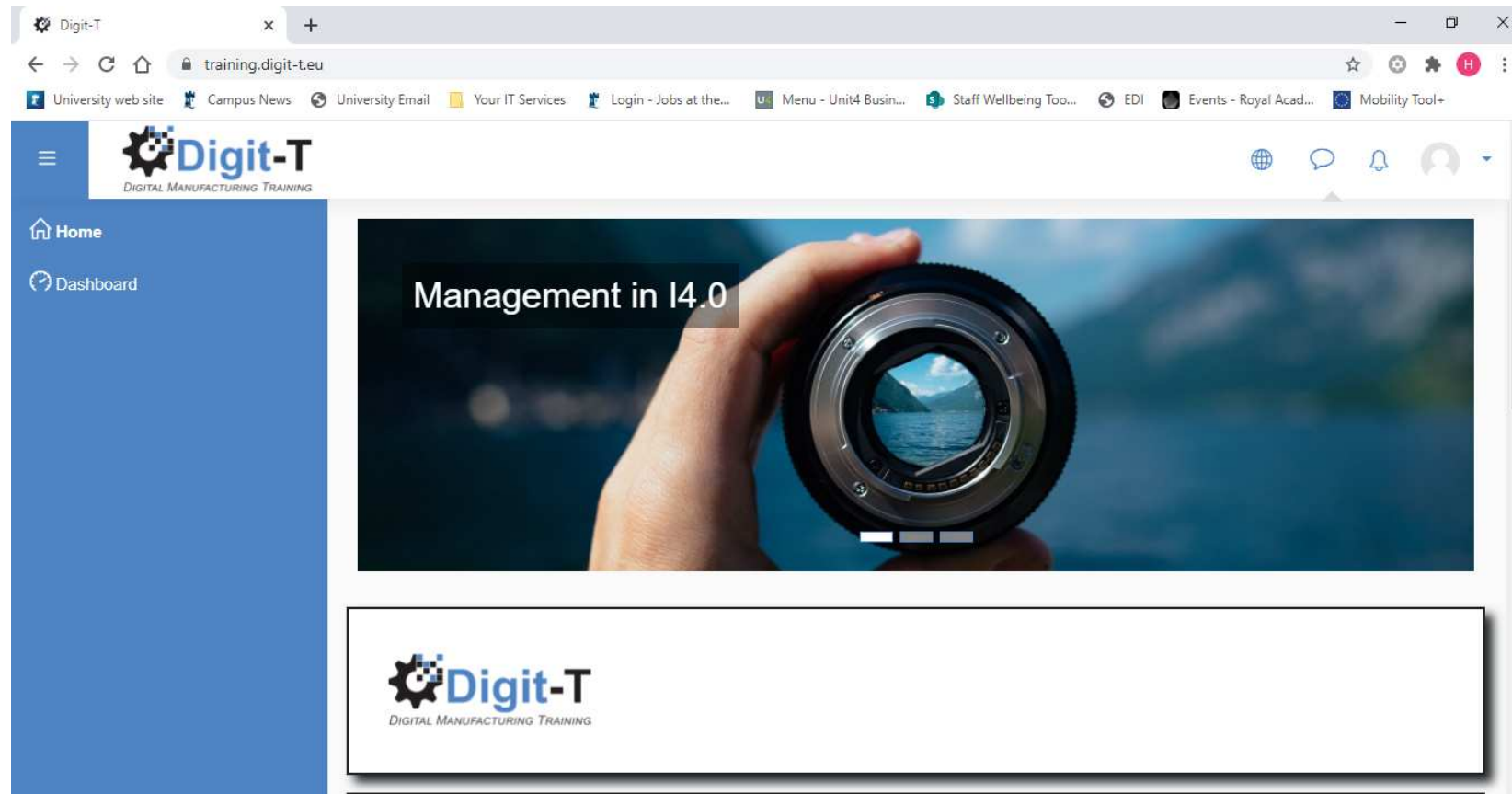
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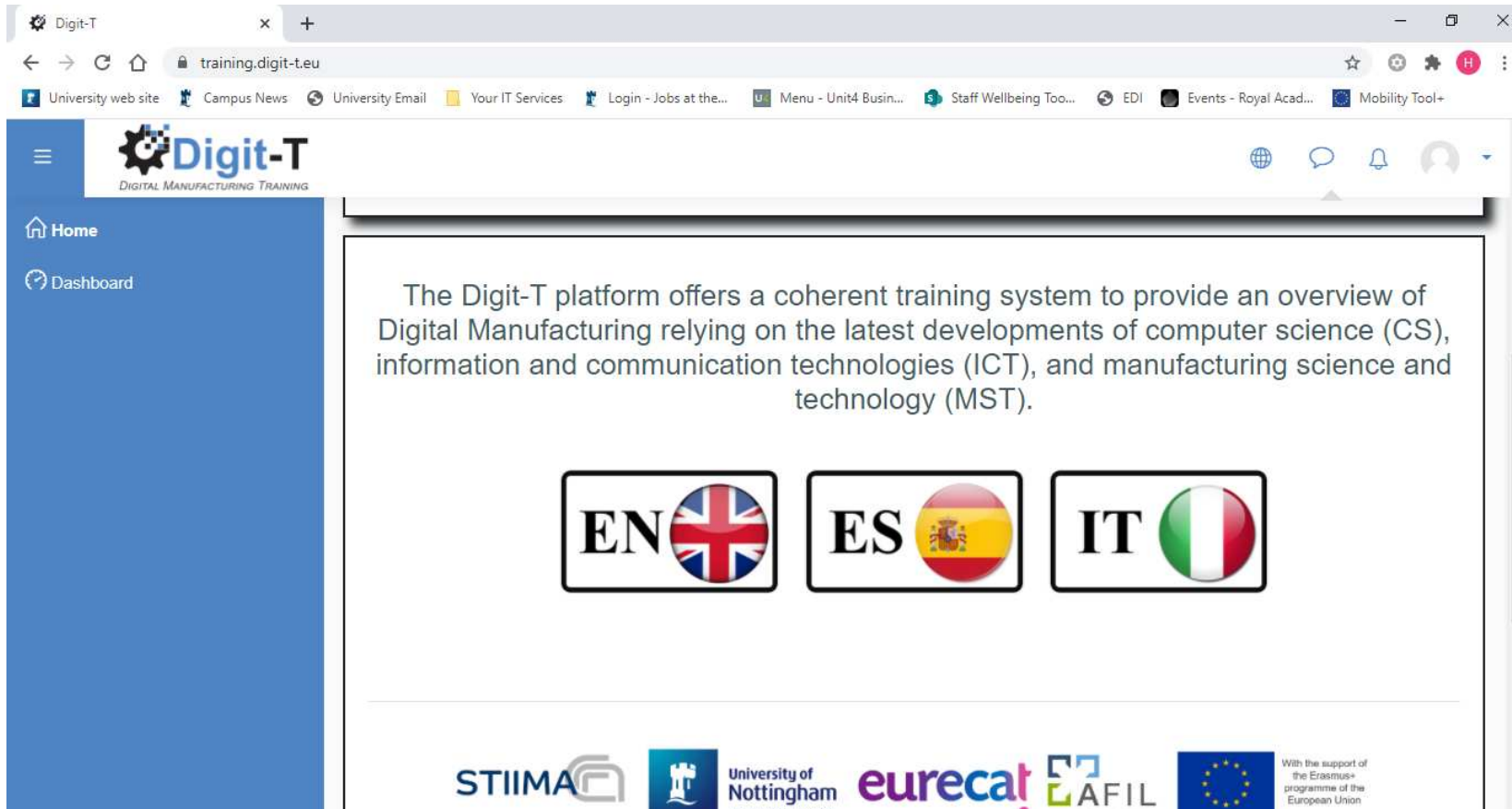
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Navigating the platform

HOME PAGE – SCROLL DOWN



HOME PAGE – SCROLL DOWN



Digit-T

training.digit-t.eu

University web site Campus News University Email Your IT Services Login - Jobs at the... Menu - Unit4 Busin... Staff Wellbeing Too... EDI Events - Royal Acad... Mobility Tool+

Home

Dashboard

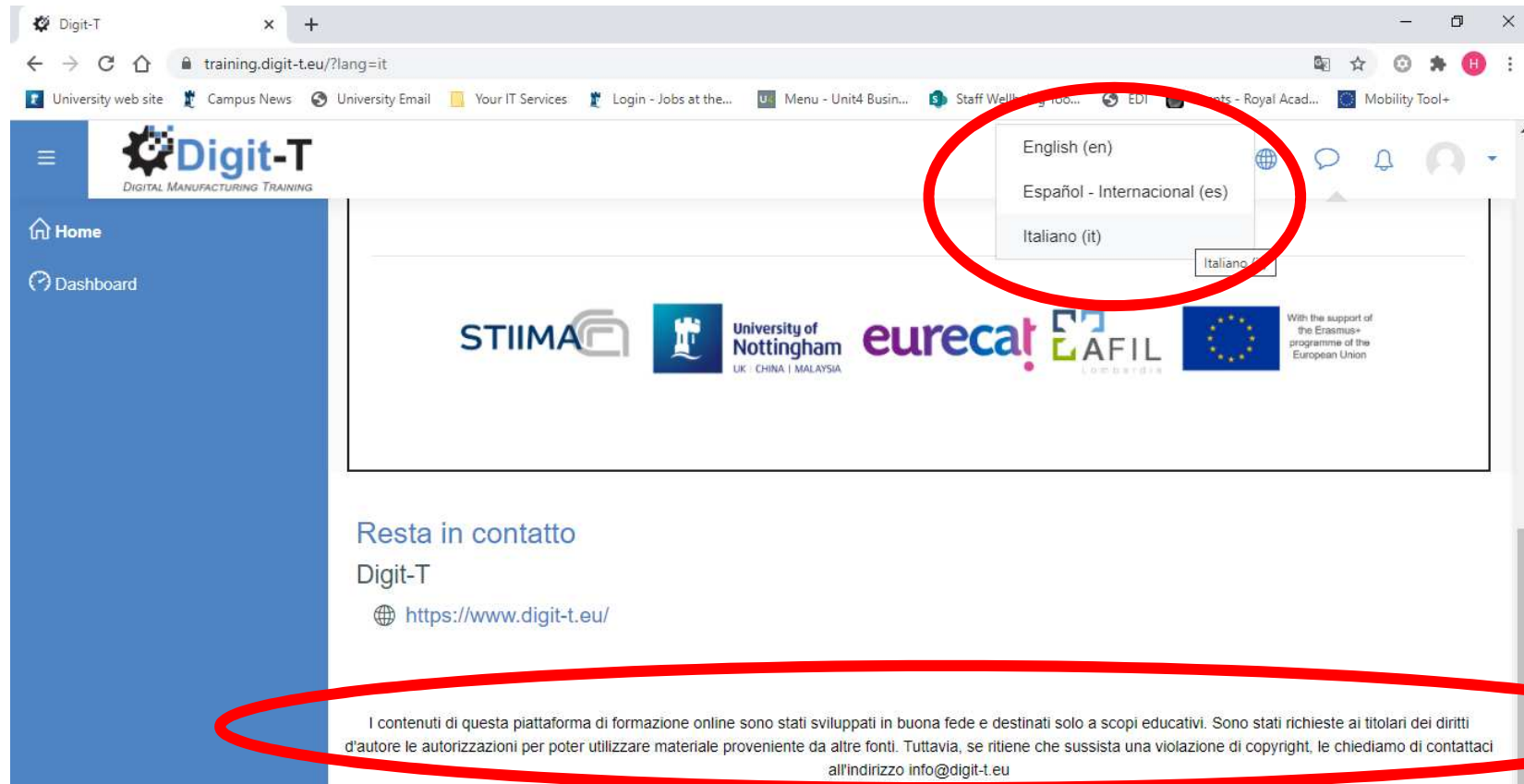
The Digit-T platform offers a coherent training system to provide an overview of Digital Manufacturing relying on the latest developments of computer science (CS), information and communication technologies (ICT), and manufacturing science and technology (MST).

EN ES IT

STIIMA University of Nottingham eurecat AFIL

With the support of the Erasmus+ programme of the European Union

YOU MAY ALSO NEED TO SWAP THE USE THE 'WORLD' KEY



The screenshot shows the Digit-T website interface. A red circle highlights the language selection menu in the top right corner, which includes the following options:

- English (en)
- Español - Internacional (es)
- Italiano (it)

Below the language menu, the website displays logos for STIIMA, University of Nottingham, eurecat, AFIL, and the European Union. A red oval highlights a disclaimer at the bottom of the page:

I contenuti di questa piattaforma di formazione online sono stati sviluppati in buona fede e destinati solo a scopi educativi. Sono stati richiesti ai titolari dei diritti d'autore le autorizzazioni per poter utilizzare materiale proveniente da altre fonti. Tuttavia, se ritiene che sussista una violazione di copyright, le chiediamo di contattarci all'indirizzo info@digit-t.eu

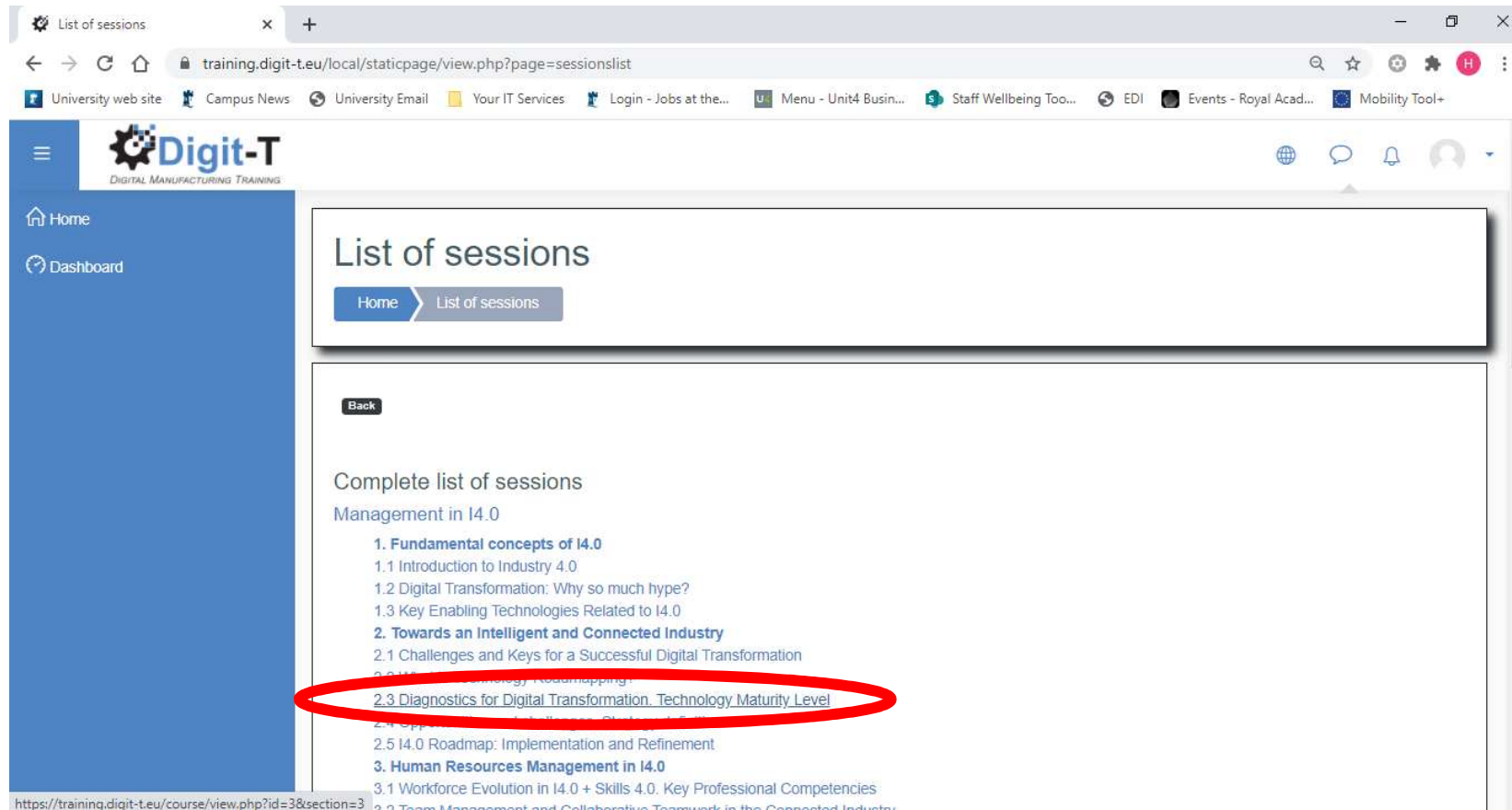
YOU ARE NOW IN THE COURSE FOR YOUR CHOSEN LANGUAGE



A screenshot of a web browser showing the Digit-T course interface. The browser's address bar displays "training.digit-t.eu/course/index.php?categoryid=5". The page has a blue sidebar on the left with a menu icon and links for "Home" and "Dashboard". The main content area has a white background. At the top, it says "ENGLISH" in a large, bold, black font. Below this is a breadcrumb trail: "Home > Courses > ENGLISH". The main heading is "ENGLISH CONTENTS" in a bold, black font. Below the heading is a blue button labeled "View list of sessions", which is circled in red. Below the button is a light blue banner with the text "We value your feedback on the platform, click here to complete our survey." Below the banner is a search bar with the placeholder text "Search courses" and a "Go" button. Below the search bar is a list of course categories: "Management in I4.0", "Advanced Manufacturing Systems", and "Intelligent Robotics". On the right side of the list is a link that says "Expand all".



CLICK ON A TOPIC, MODULE OR SESSION TO GET THERE



training.digit-t.eu/local/staticpage/view.php?page=sessionslist

University web site Campus News University Email Your IT Services Login - Jobs at the... Menu - Unit4 Busin... Staff Wellbeing Too... EDI Events - Royal Acad... Mobility Tool+

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DIGITAL MANUFACTURING TRAINING

Home Dashboard

List of sessions

Home List of sessions

[Back](#)

Complete list of sessions

Management in I4.0

- 1. **Fundamental concepts of I4.0**
 - 1.1 Introduction to Industry 4.0
 - 1.2 Digital Transformation: Why so much hype?
 - 1.3 Key Enabling Technologies Related to I4.0
- 2. **Towards an Intelligent and Connected Industry**
 - 2.1 Challenges and Keys for a Successful Digital Transformation
 - 2.2 **Technology Roadmapping**
 - 2.3 **Diagnostics for Digital Transformation, Technology Maturity Level**
 - 2.4 **Supply Chain Management Strategy in I4.0**
 - 2.5 I4.0 Roadmap: Implementation and Refinement
- 3. **Human Resources Management in I4.0**
 - 3.1 Workforce Evolution in I4.0 + Skills 4.0. Key Professional Competencies
 - 3.2 Team Management and Collaborative Teamwork in the Connected Industry

<https://training.digit-t.eu/course/view.php?id=3§ion=3>

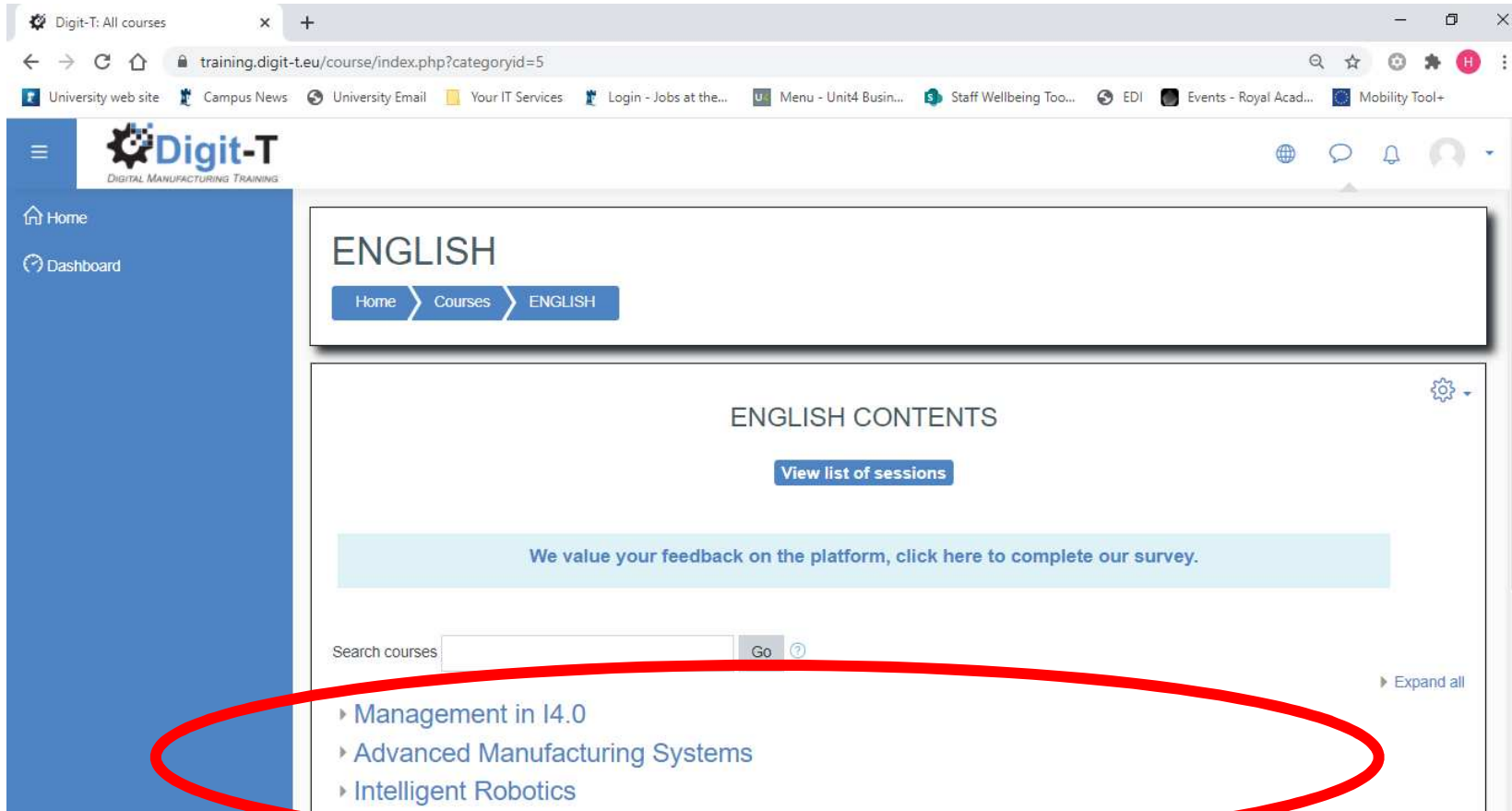
WE DO VALUE YOUR FEEDBACK



A screenshot of a web browser displaying the Digit-T training platform. The browser's address bar shows the URL "training.digit-t.eu/course/index.php?categoryid=5". The page has a blue sidebar on the left with a menu icon and links for "Home" and "Dashboard". The main content area has a white header with the "Digit-T" logo and a breadcrumb trail: "Home > Courses > ENGLISH". Below this, a section titled "ENGLISH CONTENTS" contains a button labeled "View list of sessions". A light blue banner with the text "We value your feedback on the platform, click here to complete our survey." is highlighted with a red oval. Below the banner is a search bar with the placeholder text "Search courses", a "Go" button, and a list of course categories: "Management in I4.0", "Advanced Manufacturing Systems", and "Intelligent Robotics".



3 MAIN TOPICS



The screenshot shows the Digit-T training platform interface. The browser address bar displays the URL `training.digit-t.eu/course/index.php?categoryid=5`. The top navigation bar includes links for University web site, Campus News, University Email, Your IT Services, Login - Jobs at the..., Menu - Unit4 Busin..., Staff Wellbeing Too..., EDI, Events - Royal Acad..., and Mobility Tool+. The left sidebar contains links for Home and Dashboard. The main content area is titled "ENGLISH" and includes a breadcrumb trail: Home > Courses > ENGLISH. Below this, the section is labeled "ENGLISH CONTENTS" with a "View list of sessions" button. A light blue banner states: "We value your feedback on the platform, click here to complete our survey." Below the banner is a search bar with the text "Search courses" and a "Go" button. A list of topics is displayed, including "Management in I4.0", "Advanced Manufacturing Systems", and "Intelligent Robotics". A red oval highlights the list of topics.

ENGLISH

Home > Courses > ENGLISH

ENGLISH CONTENTS

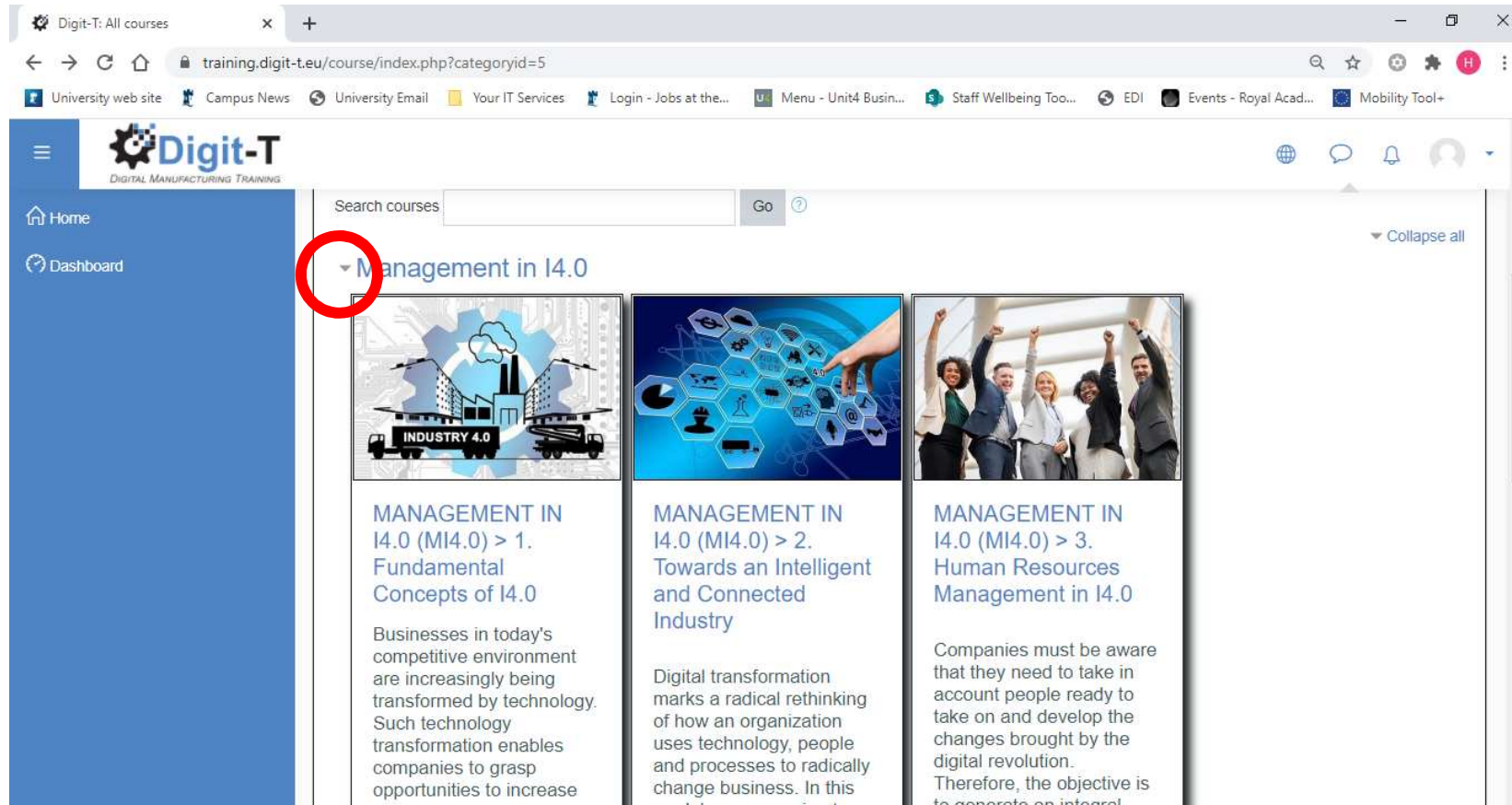
[View list of sessions](#)

We value your feedback on the platform, click here to complete our survey.

Search courses Go

- Management in I4.0
- Advanced Manufacturing Systems
- Intelligent Robotics

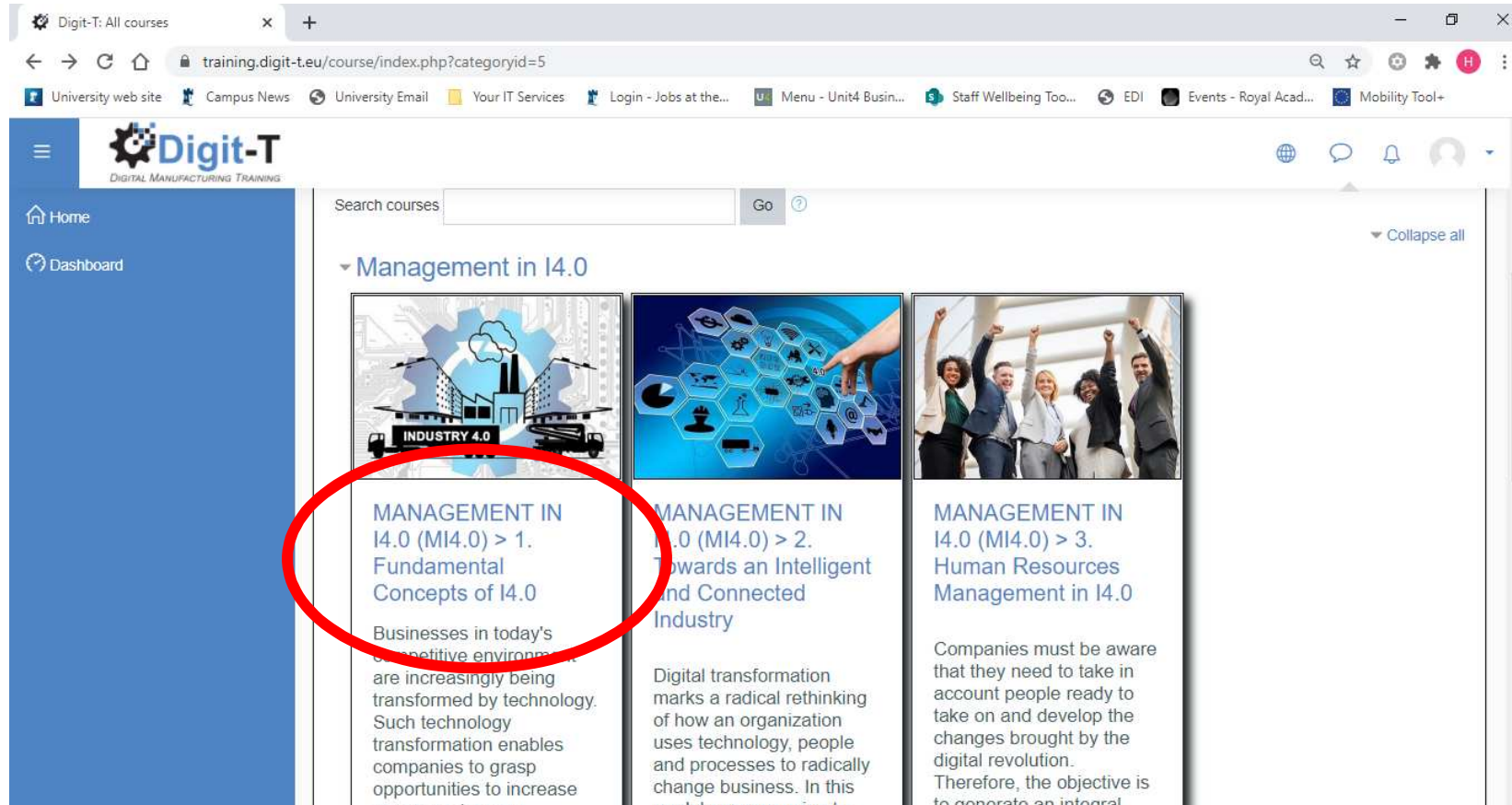
CLICK A SMALL ARROW TO SEE THE MODULES IN A TOPIC



The screenshot shows the Digit-T website interface. The top navigation bar includes links for University web site, Campus News, University Email, Your IT Services, Login - Jobs at the..., Menu - Unit4 Busin..., Staff Wellbeing Too..., EDI, Events - Royal Acad..., and Mobility Tool+. The main content area features a search bar and a list of topics. The 'Management in I4.0' topic is expanded, showing three modules:

- MANAGEMENT IN I4.0 (MI4.0) > 1. Fundamental Concepts of I4.0**
Businesses in today's competitive environment are increasingly being transformed by technology. Such technology transformation enables companies to grasp opportunities to increase...
- MANAGEMENT IN I4.0 (MI4.0) > 2. Towards an Intelligent and Connected Industry**
Digital transformation marks a radical rethinking of how an organization uses technology, people and processes to radically change business. In this module we are going to...
- MANAGEMENT IN I4.0 (MI4.0) > 3. Human Resources Management in I4.0**
Companies must be aware that they need to take in account people ready to take on and develop the changes brought by the digital revolution. Therefore, the objective is to generate an internal...

SELECT A MODULE TO REACH THE SESSIONS



Digit-T: All courses

training.digit-t.eu/course/index.php?categoryid=5

University web site Campus News University Email Your IT Services Login - Jobs at the... Menu - Unit4 Busin... Staff Wellbeing Too... EDI Events - Royal Acad... Mobility Tool+


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Home
Dashboard

Search courses Go


▼ Collapse all

▼ Management in I4.0




MANAGEMENT IN I4.0 (MI4.0) > 1. Fundamental Concepts of I4.0

Businesses in today's competitive environment are increasingly being transformed by technology. Such technology transformation enables companies to grasp opportunities to increase



MANAGEMENT IN I4.0 (MI4.0) > 2. Towards an Intelligent and Connected Industry

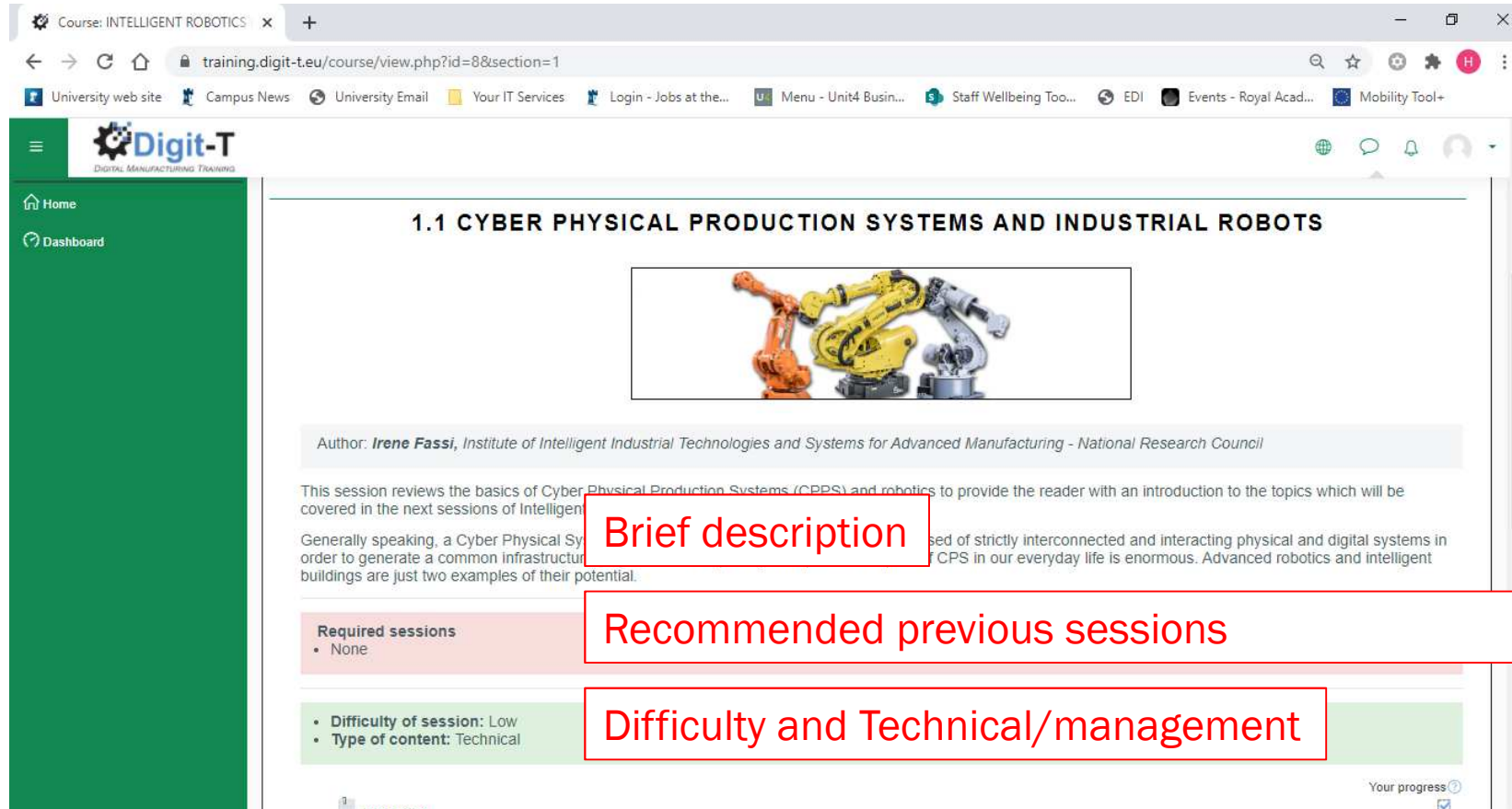
Digital transformation marks a radical rethinking of how an organization uses technology, people and processes to radically change business. In this module we are going to



MANAGEMENT IN I4.0 (MI4.0) > 3. Human Resources Management in I4.0

Companies must be aware that they need to take in account people ready to take on and develop the changes brought by the digital revolution. Therefore, the objective is to generate an internal

THE START OF EACH SESSION HAS SOME BASIC INFORMATION



The screenshot shows a web browser displaying the Digit-T course page. The browser's address bar shows the URL `training.digit-t.eu/course/view.php?id=8§ion=1`. The page features a green sidebar with 'Home' and 'Dashboard' links. The main content area is titled '1.1 CYBER PHYSICAL PRODUCTION SYSTEMS AND INDUSTRIAL ROBOTS' and includes an image of industrial robots. Below the image, the author is listed as Irene Fassi. A 'Brief description' box highlights the session's purpose. A 'Recommended previous sessions' box indicates 'None'. A 'Difficulty and Technical/management' box lists 'Difficulty of session: Low' and 'Type of content: Technical'. A 'Your progress' indicator is visible at the bottom right.

Course: INTELLIGENT ROBOTICS x +


training.digit-t.eu/course/view.php?id=8§ion=1

University web site Campus News University Email Your IT Services Login - Jobs at the... Menu - Unit4 Busin... Staff Wellbeing Too... EDI Events - Royal Acad... Mobility Tool+

Digit-T
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Home
Dashboard

1.1 CYBER PHYSICAL PRODUCTION SYSTEMS AND INDUSTRIAL ROBOTS



Author: **Irene Fassi**, Institute of Intelligent Industrial Technologies and Systems for Advanced Manufacturing - National Research Council

This session reviews the basics of Cyber Physical Production Systems (CPPS) and robotics to provide the reader with an introduction to the topics which will be covered in the next sessions of Intelligent Manufacturing.

Generally speaking, a Cyber Physical System is a system composed of strictly interconnected and interacting physical and digital systems in order to generate a common infrastructure. The impact of CPS in our everyday life is enormous. Advanced robotics and intelligent buildings are just two examples of their potential.

Brief description

Recommended previous sessions

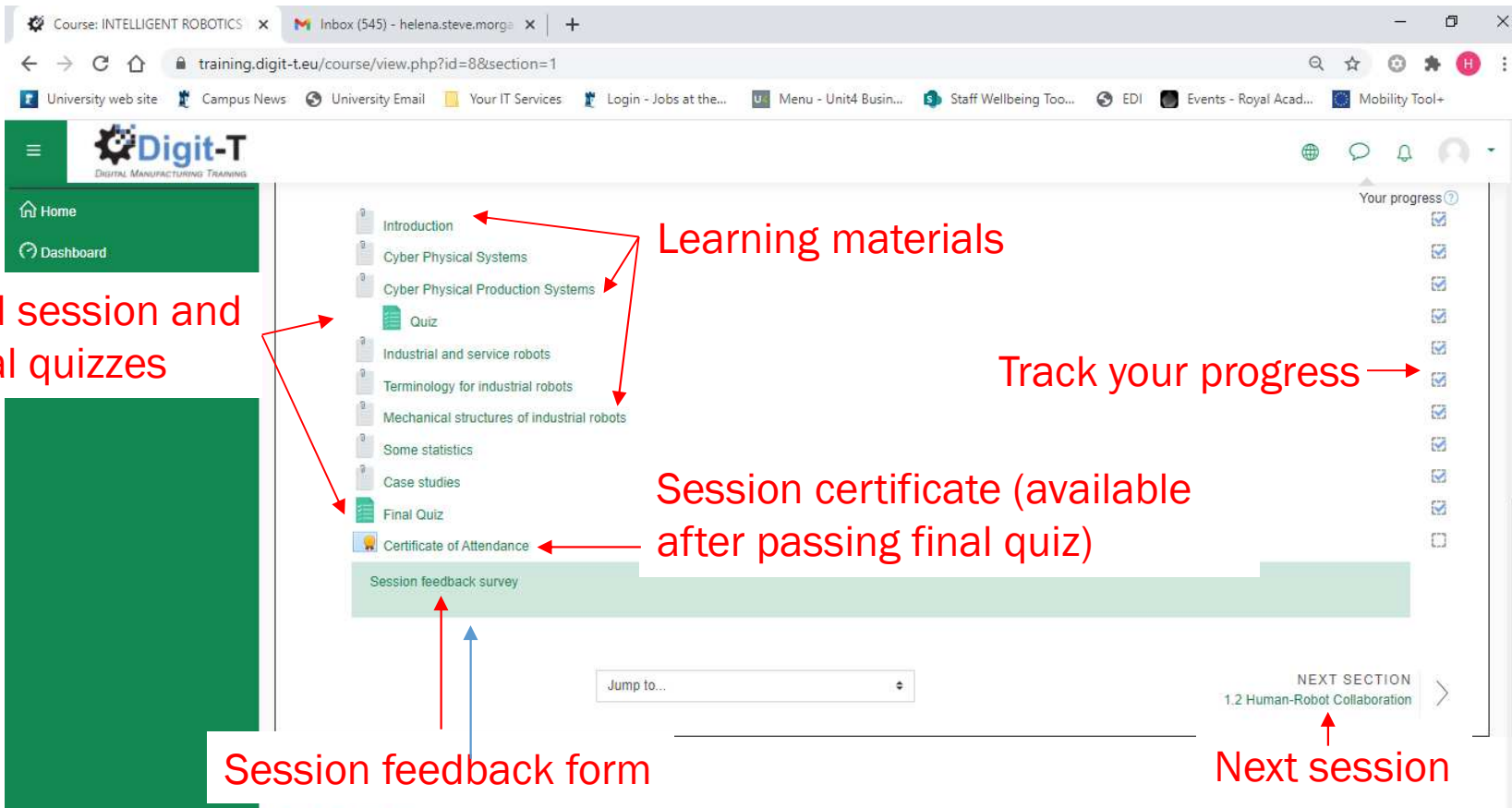
- Required sessions
- None

- Difficulty of session: Low
- Type of content: Technical

Difficulty and Technical/management

Your progress ? ☒

COMMON FEATURES IN SESSIONS



The screenshot shows a web browser displaying the Digit-T course page for 'INTELLIGENT ROBOTICS'. The interface includes a sidebar with 'Home' and 'Dashboard' links, a main content area with a list of topics, and a 'Your progress' sidebar on the right. Red arrows point to specific features: 'Learning materials' points to the first four topics; 'Mid session and final quizzes' points to the 'Quiz' and 'Final Quiz' items; 'Track your progress' points to the progress bar on the right; 'Session certificate (available after passing final quiz)' points to the 'Certificate of Attendance' item; and 'Session feedback form' points to the 'Session feedback survey' item. A 'Next session' arrow points to the 'NEXT SECTION' link at the bottom right.

Course: INTELLIGENT ROBOTICS x | Inbox (545) - helena.steve.morg... x | +

training.digit-t.eu/course/view.php?id=88§ion=1

University web site | Campus News | University Email | Your IT Services | Login - Jobs at the... | Menu - Unit4 Busin... | Staff Wellbeing Too... | EDI | Events - Royal Acad... | Mobility Tool+

Digit-T
DIGITAL MANUFACTURING TRAINING

Home
Dashboard

Introduction
Cyber Physical Systems
Cyber Physical Production Systems
Quiz
Industrial and service robots
Terminology for industrial robots
Mechanical structures of industrial robots
Some statistics
Case studies
Final Quiz
Certificate of Attendance
Session feedback survey

Learning materials

Mid session and final quizzes

Track your progress

Session certificate (available after passing final quiz)

Session feedback form

Next session

Jump to...

NEXT SECTION
1.2 Human-Robot Collaboration

Your progress ?

LEARNING PAGE FEATURES

1. Industrial and Collaborative Robotics

Inbox (545) - helena.steve.morgan

training.digit-t.eu/mod/page/view.php?id=848&forceview=1

University web site Campus News University Email

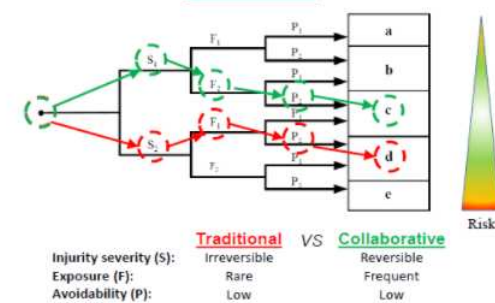
EDI Events - Royal Acad... Mobility Tool+

Acronyms list
Click to view acronym meaning

Fig. 3 Workspace sharing in collaborative workcells [4]. The operator can access only the collaborative workspace.

With reference to the risk assessment described in the standard EN ISO 13849-1 "Safety of machinery - Safety-related parts of control systems", a simplification of the safety performance level is expected in the design of the safety functions of robot controllers.

Click on image to enlarge



	Traditional	VS	Collaborative
Injury severity (S):	Irreversible		Reversible
Exposure (F):	Rare		Frequent
Avoidability (P):	Low		Low

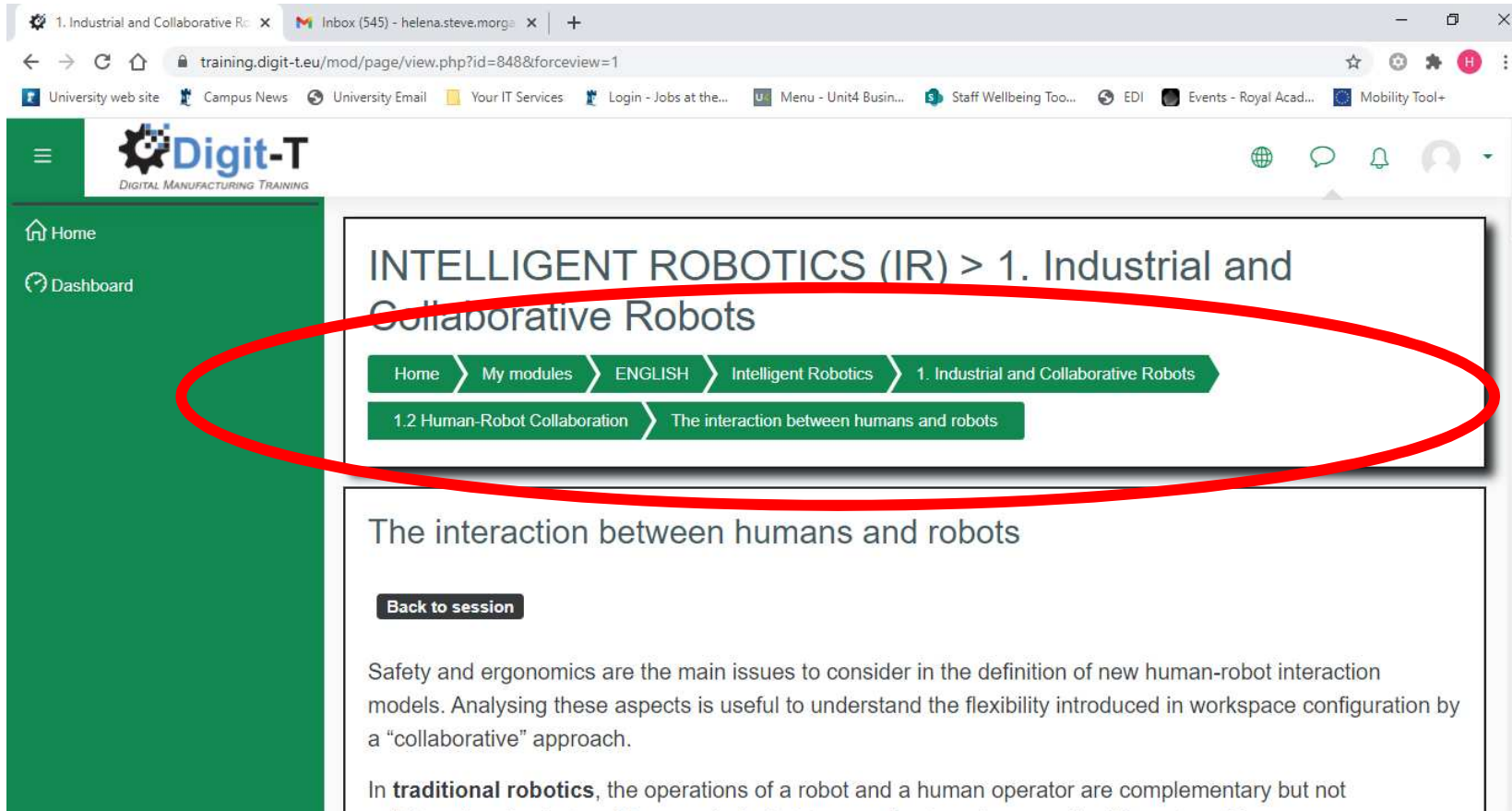
Diagrams, images and/or videos
Many images can be enlarged

References to other materials

The Performance Level (PL) of safety functions in control systems is based on the probability of dangerous failure per hour. An example of a comparison between traditional (PL d) and collaborative (PL c) robots from the risk assessment perspective is reported, highlighting the assessment method as per the definition of the applicable standard. Collaborative robots can be characterized by lower PL, as the intrinsic safety guarantees higher safety levels.

References

NAVIGATING BACK UP THE COURSE



The screenshot shows a web browser window with the URL `training.digit-t.eu/mod/page/view.php?id=848&forceview=1`. The page features a green sidebar on the left with a menu containing 'Home' and 'Dashboard'. The main content area has a header with the Digit-T logo and a navigation breadcrumb trail. A red oval highlights the breadcrumb trail, which consists of two rows of green buttons with white text and right-pointing chevrons. The first row contains: 'Home', 'My modules', 'ENGLISH', 'Intelligent Robotics', and '1. Industrial and Collaborative Robots'. The second row contains: '1.2 Human-Robot Collaboration' and 'The interaction between humans and robots'. Below the breadcrumb trail, the main content area displays the title 'The interaction between humans and robots' and a 'Back to session' button. The text below the button discusses safety and ergonomics in human-robot interaction models.

1. Industrial and Collaborative Robots

Home > My modules > ENGLISH > Intelligent Robotics > 1. Industrial and Collaborative Robots

1.2 Human-Robot Collaboration > The interaction between humans and robots

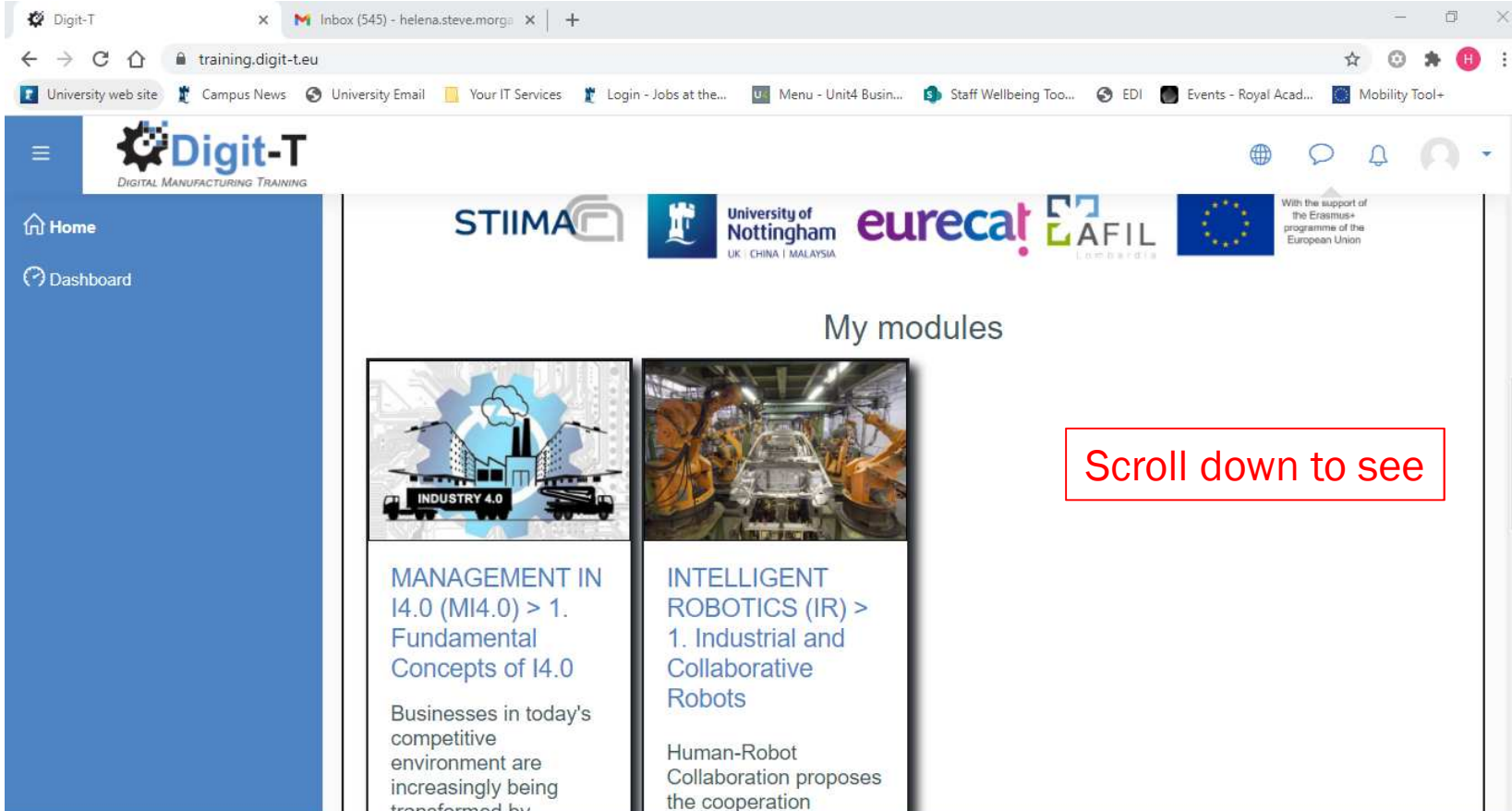
The interaction between humans and robots

[Back to session](#)

Safety and ergonomics are the main issues to consider in the definition of new human-robot interaction models. Analysing these aspects is useful to understand the flexibility introduced in workspace configuration by a “collaborative” approach.

In **traditional robotics**, the operations of a robot and a human operator are complementary but not

YOU CAN SEE YOU'RE YOUR MODULES ON THE HOME PAGE



The screenshot shows a web browser window with the URL `training.digit-t.eu`. The page features a blue sidebar on the left with a menu containing 'Home' and 'Dashboard'. The main content area has a header with logos for STIIMA, University of Nottingham, eurecat, AFIL, and the European Union. Below the header, the section 'My modules' displays two cards. The first card, titled 'MANAGEMENT IN I4.0 (MI4.0) > 1. Fundamental Concepts of I4.0', includes the text 'Businesses in today's competitive environment are increasingly being transformed by'. The second card, titled 'INTELLIGENT ROBOTICS (IR) > 1. Industrial and Collaborative Robots', includes the text 'Human-Robot Collaboration proposes the cooperation'. A red-bordered box with the text 'Scroll down to see' is positioned to the right of the module cards.

Digit-T
DIGITAL MANUFACTURING TRAINING

Home
Dashboard

STIIMA University of Nottingham eurecat AFIL

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My modules

INDUSTRY 4.0

MANAGEMENT IN I4.0 (MI4.0) > 1. Fundamental Concepts of I4.0

Businesses in today's competitive environment are increasingly being transformed by

INTELLIGENT ROBOTICS (IR) > 1. Industrial and Collaborative Robots

Human-Robot Collaboration proposes the cooperation

Scroll down to see

Happy learning!



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