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TỔNG CỤC GIÁO DỤC NGHỀ NGHIỆP
DIRECTORATE OF VOCATIONAL EDUCATION AND TRAINING

The Programme "Reform of TVET in Vietnam"

DIGITAL LITERACY TRAINING MODULE

FOR COLLEGE LEVEL AND INTERMEDIATE LEVEL

Hanoi, September 2023

General Information

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Program Reform of Technical Vocational Education and Training in Vietnam
No. 1, Lane 17 Ta Quang Buu, Hai Ba Trung District, Hanoi
T: +84 24 397 46 571
E: office.tvet@giz.de
W: www.tvet-vietnam.org/ www.giz.de

Coordinating Organization:	**Program Reform of Technical Vocational Education and Training in Vietnam** MSc. Pham Xuan Hoan Ms. Nguyen Nguyet Linh
Collaborating Organization:	**Department of Formal Training, Directorate of Vocational Education and Training** Dr. Ha Duc Ngoc
Group of Compiling:	**GIZ's Consultants** Dr. Vu Quang Khue MSc. Bui Thu Trang MSc. Pham Ngoc Hoa MSc. Bui Quang Khai

German Corporation for International Cooperation GmbH, GIZ
Program Reform of TVET in Vietnam

Directorate of Vocational Education and Training
Department of Formal Training

MODULE: DIGITAL LITERACY
INTERMEDIATE AND COLLEGE LEVEL

(Syllabus – Implementation Guidelines – Assignment)

First version

Hanoi, September 2023

Module Digital Literacy is officially developed

by the Consultants and cooperation partners of the Program Reform of Technical Vocational Education and Training in Vietnam.

Address: No. 1, Lane 17, Ta Quang Buu Street, Bach Khoa Ward, Hai Ba Trung District, Hanoi, Vietnam

***Tel:** +84 (0) 24 39 74 64 71*

***Website:** www.tvet-vietnam.org*

www.giz.de/vietnam

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PART I. MODULE: DIGITAL LITERACY - COLLEGE LEVEL

SECTION A. SYLLABUS OF MODULE: DIGITAL LITERACY - COLLEGE LEVEL

Name of module: Digital literacy

Code of module:

Duration: 75 hours (theory: 15 hours; practice, discussions & assignments: 58 hours; exams: 2 hours).

I. Module Position and Description

1. Position

Digital literacy is a module in the general education category of the college study program.

2. Description

The module equips students with basic digital competence as well as use of platforms, applications, software and digital devices that can be applied in studying, working and lifelong learning in the future.

II. Objectives of Module

After completing this course, students will achieve basic digital competence, in particular:

1. Knowledge

- Present and explicate basic knowledge about internet, digital devices, software, platforms, content creation, and use of applications in digital environments

- Understand security, safety and behavioral culture issues while participating in digital environments**.**

2. Skills

- Be able to use computers and digital devices, and exploit application software in digital devices to meet requirements for studying and working safely in the digital environment;

- Be able to use online platforms and software of word processing, spreadsheet, presentation, image, sound and video creation; and utilize them in study and future work;

- Be able to share and exchange digital data and information in study and work, applied in implementing electronic public services and e-commerce;

- Be able to apply protective measures to prevent different types of risks threatening data safety as well as potential dangers associated with social networking sites; apply safety, security and information protection;

- Be able to follow rules about culture and information safety and privacy; follow rules about labor safety and environment protection while using computers, digital devices and information technology applications.

3. Autonomy and Responsibility

- Be able to recognize the importance of and obey relevant laws, and make responsible use of computers, digital devices, information technology and communications in everyday life, study and work;

- Be able to comply with regulations on data protection of individuals, organizations and third parties in the digital environment;

- Be able to work independently or with teams while applying basic digital competence in studying, working and other activities.

III. Module Content

1. Content Overview and Structure

Seq.	Content	Time (hour)			
		Total	Theory (T)	Practice, discussions, assignments (P)	Tests
1	Lesson 1: Introduction to digital competence	2	1	1	
2	Lesson 2: Using digital devices and software	10	2	8	
3	Lesson 3: Working in digital environments	10	3	7	
4	Test	1			1
5	Lesson 4: Creating digital content	36	6	30	
6	Test	1			1
7	Lesson 5: Applying digital competence in career	15	3	12	
	Total	**75**	**15**	**58**	**2**

2. Content Details

LESSON 1. INTRODUCTION TO DIGITAL COMPETENCE

Duration: 2h (T: 01h, P: 01h)

1. Objectives

After completing this lesson, students will be able to:

- Present basic knowledge about the 4th industrial revolution, and its impact on human life. Have a general grasp of digital competence and its role in studying and working;

- Search, collect information, discuss and explain the context of digital transformation and the demand for digitally skilled human resources; understand the meaning and role of digital citizens at school and work today.

2. Content

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
	Introduction to digital competence	**1**	**1**	
1	**Introduction to module Digital literacy**			
1.1	Module learning and assessment methods			
1.2	Learning platforms and materials			
2	**History of the Development of Industrial Revolutions**			
2.1	Mechanization with hydraulic and steam machines (1st Industrial Revolution)			
2.3	Electronic engines and assembly lines (2nd Industrial Revolution)			
2.4	Computers and automation (3rd Industrial Revolution)			
2.5	Systems linking the physical, digital and biological worlds (4th Industrial Revolution)			
3	**Impact of the fourth industrial revolution on several areas**			
3.1	Labor and employment			
3.2	Health and education			
3.3	Industry and agriculture			
4	**Overview of Digital Competence**			
4.1	Digital competence			
4.2	Digital citizens			

4.3	Digital transformation and the demand for digitally skilled human resources			

LESSON 2. USING DIGITAL DEVICES AND SOFTWARE

Duration: 10h (T: 02h, P: 08h)

1. Objectives

After completing this lesson, students will be able to:

- Present basic knowledge about computers and digital devices;

- Use available functions of Windows operating systems to fine-tune and personalize devices; use cloud services;

- Access and use digital devices and software effectively.

2. Content

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
1	**Introduce Digital Devices and Software**	**1**	**2**	
1.1	Digital devices			
	Definition			
	Classification			
1.2	Application software and online platforms			
	System software			
	Application software			
	Utility software			
	Online platforms			
1.3	Open-source software			
2	**Use Digital Devices and Software**	**1**	**6**	
2.1	Manage files and folders on Windows Operating System			
	Select, copy, and move files and folders			
	Delete and restore files and folders			
	Search for files and folders			
2.2	Use some utility software			
	Software for compressing and decompressing files			

	Anti-virus software			
2.3	Manage hardware and software with Setting & Control Panel			
	Bluetooth and other wireless devices			
	Screen, sound, notification, electric and battery sources			
	Appearance and Personalization			
	Uninstall and fine-tune software			
	Network and Internet			
	Privacy and maintenance			
2.4	Technology ecology			
	Definition, classification			
	Major technology ecologies			

LESSON 3. WORKING IN DIGITAL ENVIRONMENT

Duration: 10h (T: 03h, P: 07h)

1. Objectives

After completing this lesson, students will be able to:

- Present basic knowledge about the Internet and digital environments;

- Use basic software and online platforms in digital environments for study, entertainment and work at basic level;

- Behave and communicate properly and responsibly while sharing and using information in digital environments;

- Comply with regulations on data protection of individuals, organizations and third parties in the digital environment;

- Assess risks and prevent risks in the digital environment.

2. Content

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
1	**Basic knowledge about the Internet and Digital Environment**	**1**	**1**	
1.1	Internet			
	Overview			
	History of Development			

1.2	Digital Environment			
	Differentiate data, information and knowledge			
	Search, evaluate and use information in digital environment			
1.3	Organize, store and share data in the digital environment (cloud)			
	Create Account			
	Organize and store data			
	Share data			
2	**Major Online Platforms**		**2**	
2.1	Social networks, media			
2.2	Online services and applications			
	Entertainment			
	E-Commerce			
	Administration			
	Study and work			
	Work management			
	Meeting			
	Collaboration at work			
3	**Major AI Platforms**		**1**	
3.1	Question and Answer			
3.2	Study, work			
3.3	Entertainment			
4	**Culture in Cyberspace**	**1**	**1**	
4.1	Guidelines for behavior in cyberspace			
4.2	Social ethical standards in cyberspace			
5	**Information security and network security**	**1**	**2**	
5.1	Share and use information safely			
5.2	Attacks in cyberspace and preventive measures			
5.3	Assess risks and protect personal, organizational and third-party information.			

Test 1: 1 hour

LESSON 4. CREATING DIGITAL CONTENT

Duration: 36h (T: 06h, P: 30h)

1. Objectives

After completing this lesson, students will be able to:

- Explain the uses of software and applications for creating digital content;

- Use software and applications to create and edit content (texts, spreadsheets, presentations, personal data pages with such data as texts, images, sound, videos, etc.).

2. Content

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
1	**Text Processing**	**1.5**	**8**	
1.1	Format texts			
	Format pages (Page Setup, Page Background, Style Set)			
	Format paragraphs (Paragraph, Styles, Column, Tab, Drop Cap)			
1.2	Insert into texts			
	Table			
	Illustrations			
	Links			
	Comments			
	Header & Footer			
	Text			
	Symbols			
1.3	References			
	Table of Contents			
	Create note			
1.4	Mail merge			
1.5	Distribute texts			
	Save texts with different file formats			
	Save texts on the world wide web			
	Export files			
	Print			
2	**Spreadsheet Processing**	**2**	**14**	
2.1	Enter Data			
	Different types of data			
	Enter and edit data			
2.2	Format Data			
	Format data cells			

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
	Format data areas			
	Format data sheets			
2.3	Process data			
	Use mathematical statements (definition, creating simple arithmetic expressions, common mistakes)			
	Use mathematical functions (definition, syntax, how to enter functions; comparison operators; basic functions; conditioning functions; logical functions; date and month functions; chain functions; search functions; conditional functions)			
	Sort and filter data			
2.4	Draw charts			
	Types of charts			
	Create and correct charts			
2.5	Distribute spreadsheets			
	Save spreadsheets as different file formats			
	Secure data, and set passwords to protect spreadsheets			
	Save spreadsheets on the world wide web			
	Lay out spreadsheets for printing			
	Print spreadsheets			
3	**Presentation Processing**	**1**	**4**	
3.1	Notes on designing presentations			
	Factors affecting presentations			
	Use available presentation templates			
3.2	Basic steps in creating presentations			
	Create slides			
	Create texts and formats			
	Insert into slides (Pictures, Shape, WordArt, Textbox, Table, Chart, SmartArt, Audio, Video, Link)			
3.3	Effects for presentations			

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
	Animations			
	Transitions			
	Slide Show			
3.4	Distribute presentations			
	Save presentations as different file formats			
	Save presentations on cloud storage services			
	Print presentations			
4	**Create Images, audio and video**	**1.5**	**4**	
4.1	Create images			
	Introduce image file formats			
	Create vector images			
	Save and send image files			
4.2	Create audio			
	Introduce some popular audio file formats			
	Create audio files by recording			
	Save and send audio files			
4.3	Create video			
	Introduce some popular video file formats and video recording software			
	Create video files by recording			
	Save and send video files			

Test 2: 1 hour

LESSON 5. APPLYING DIGITAL COMPETENCE IN CAREER

Duration: 15h (T: 03h, P: 12h)

1. Objectives

After completing this lesson, students will be able to:

- Explain the uses of online office applications;

- Use online office applications to communicate and collaborate in study and work in line with behavioral and moral standards.

2. Content

Seq.	Content	Time (hour)

		Theory	Practice, discussions, assignments	Tests
1	**Manage Work with Calendar**	**0.5**	**0.5**	
1.1	Create task reminders			
1.2	Create appointment schedules			
1.3	Create events			
2	**Create and Manage Online Meetings**	**0.5**	**0.5**	
2.1	Select online meeting applications			
2.2	Create immediate and planned meetings			
2.3	Manage meetings			
3	**Collaborate to Create Digital Content**	**1**	**5**	
3.1	Create accounts in the apps			
3.2	Create content files (create completely new files or upload available ones)			
3.3	Share files with partners			
3.4	Work on shared files			
3.5	Manage shared data			
4	**Create Personal Data Pages**	**1**	**6**	
4.1	What is a personal data page?			
4.2	Introduce some applications for creating personal data pages			
4.3	Create a personal data page (create page structure and content)			
4.4	Manage a personal data page			

Final Exam/Instructions and Assessment of Assignment

IV. Module Implementation Conditions

1. Integrated Classroom

- The integrated classroom needs to have an Internet connection and is equipped with adequate lighting and air conditioning.

- Desks, chairs and computers in quantities that meet standards for practice classrooms;

- Instructor’s desk and chair, board and board marker.

2. Equipment

- Computers installed with Windows Operating System, Microsoft Office (Microsoft Word, Microsoft Excel, Microsoft PowerPoint) and utility software.

- Projector, printer, Wi-Fi, network cable (RJ45); loudspeaker.

- Digital devices in media and telecommunications (if available).

3. Teaching & Learning Materials

- Textbooks, syllabus, slides

- Program of Module Digital literacy

- Sample and regulations for using assignment/e-Portfolio (if colleges do not hold final exam)

- Reference Materials and Implementation Guidelines

4. Other Conditions

Encourage vocational education institutions to equip classrooms and other conditions to be able to implement blended learning, including:

- Learning Management System - LMS

- A practice room or equipment to produce clip/video/ audio content…

- A computer for editing videos and helping to produce packaged lessons: the computer has adequate RAM capacity for editing videos and installing such software as Adobe Premiere, Adobe Audition, Adobe After Effect and Articulate Storyline, etc.

V. Assessment Content and Method

The assessment of students' learning results is carried out in accordance with Circular 04/2022/TT-BLĐTBXH approved on 30/3/2022 by the Minister of Labor, War Invalids & Social Affairs on the organization of the training of intermediate and college curricula according to a year-based, or module or credit-based format

1. Contents

- Knowledge: assessed in the form of written tests, multiple choice tests on the LMS system or integrated into periodic tests with integrated test questions according to the following contents:

+ The meaning and role of digital competencies in learning and working;

+ Classification and methods of using some digital devices and software;

+ Rules of behavior in the digital environment and distinguishing between online platforms;

+ Knowledge and process of creating digital content related to creating digital content

- Skills: assessed through periodic or regular tests directly or indirectly (on the LMS system) through the implementation sequence and products required from teacher:

+ Process and skills in using digital devices;

+ Working in digital environment;

+ Create digital content and skills to apply digital content for career orientation

- Autonomy and responsibility: assessed by the observation method with a checklist, meeting the requirements:

+ Ensure study hours;

+ Be self-aware, highly disciplined, have a spirit of teamwork, and be responsible for the tasks assigned by teacher;

+ Careful, meticulous and accurate; proactive and creative in assigned work

2. Methods

- Regular assessments: performed directly or indirectly (on the LMS system) through multiple-choice questions on related knowledge or skills assessments at appropriate time. The minimum number of regular tests is 03.

- Periodic assessments: 02 tests are conducted using integrated tests (knowledge and ability to perfect products) with evaluation criteria. The total score of the exam can be on a 10-point scale or a 100-point scale, which is an integration of both theoretical content and skills. The time for one exam is 60 minutes.

- Final exam: Depending on conditions, the school can specify one of the following two forms:

+ The exam: using integrated test (knowledge and ability to perfect products), minimum exam time of 60 minutes (not included in the 75-hour training program).

+ Assessment by assignment: The assessment product is a portfolio saved in print, pdf file, video file..., according to criteria specifically issued by the school and notified to students at the beginning of the course.

VI. Implementation Guidelines

1. Scope of Application

The Digital literacy module is designed for college students, and consists of 75 hours (theory, practice and test).

2. Instructions on Teaching and Learning Methods

- For teachers:

+ Teachers need to base on the content of each lesson and training program instructions to fully prepare the necessary conditions to ensure teaching quality and at the same time be responsible for guiding the self-study process and self-preparation of students.

+ Refer to the Module Implementation Guide and reference documents to prepare detailed outlines, lesson plans, tests, assessments and instructions for implementing Assignment/e-Portfolio.

+ Prepare presentation slides for classroom sessions. If blended learning is allowed, record online lectures and guide students to study before going to class.

+ Inform students from the first session about how to deploy the module, the module's objectives, content, and testing/exam/evaluation methods.

- For students:

+ Ensure the number of study hours according to current regulations.

+ Prepare all lessons and self-study online (following the instructor's instructions, if any) before class.

+ Actively participate in group discussions, speeches, and presentations to expand knowledge and practice skills in class with the guidance of instructors.

+ Some contents can be practiced at businesses with adequate equipment and practice platforms.

3. Key Points

- The Digital literacy module is built with the desire to deploy active learning, project-based learning and blended learning to improve efficiency. However, depending on the physical conditions and instructors, the school will decide the most appropriate way to implement the module.

- The school can evaluate and select appropriate contents of the Digital literacy module to teach and evaluate students according to the content of section V.

- Teachers use appropriate time to introduce contents and implementation methods of the digital literacy module.

4. References

[1] Decision No. 749/QD-TTg dated June 3, 2020 of the Prime Minister approving *"National Digital Transformation Program to 2025, with a Vision to 2030".*

[2] Decision No. 2222/QD-TTg dated December 30, 2021 of the Prime Minister on the approval of *the Digital Transformation Program in Vocational Education for 2021-2025, with a Vision to 2030*.

[3] General Directorate of Vocational Training, 2020, *Teaching and Learning Materials for Informatics (College Study Program),* Ministry of Labor, War Invalids & Social Affairs, Construction Publishing House & Labor and Social Affairs Publishing House

[4] European Commission, 2022, *DigComp 2.2 - The Digital Competence Framework for Citizens,* Joint Research Center.

[5] UNESCO, 2018, *A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2.*

[6] Ho Tu Bao - Nguyen Nhat Quang, 2022, *How to digitally transform*, Information and Communications Publishing House.

[7] Ho Tu Bao - Nguyen Nhat Quang, 2023, *Q&A about Digital Transformation*, Information and Communications Publishing House.

[8] Ministry of Information and Communications, 2021, *Digital Transformation Handbook*, Information and Communications Publishing House.

[9] Bernard Marr; Translator: Pham Duy Trung, 2023, *Tech Trends in Practice: The 25 Technologies that are Driving the 4th Industrial Revolution,* 1st Edition, Information and Communications Publishing House.

5. Notes and Explanations

Module Digital literacy is developed for college students in the TVET. The course curriculum is designed according to the international digital competence frameworks established by organizations like UNESCO and the European Commission. Course researchers and developers hope to enable students to achieve learning outcomes that approach the standards set out by the Digital Transformation Project approved by the Prime Minister according to Decision No. 2222/QĐ-TTg on the Digital Transformation Program in Vocational Education for 2021 - 2025, with a Vision to 2030

SECTION B. IMPLEMENTATION GUIDELINES OF MODULE DIGITAL LITERACY - COLLEGE LEVEL

CONTENT	THEORY (hours)	PRACTICE (hours)	OBJECTIVES	MATERIALS	TEACHING AND LEARNING ACTIVITIES	EQUIPMENT
LESSON 1. INTRODUCTION TO DIGITAL COMPETENCE	**1**	**1**				
1. Introduction to module Digital literacy 2. History of the Development of Industrial Revolutions 3. Impact of the fourth industrial revolution on several areas 4. Overview of Digital Competence	1		Understand and present an overview of the concept and impact of the 4th industrial revolution and digital transformation on learning and employment.	1. http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf. 2. https://slejournal.springeropen.com/track/pdf/10.1186/s40561-019-0089-y.pdf 3. https://home.kpmg/xx/en/home/industries/government-public-sector/education/the-future-of-higher-education-in-a-disruptive-world.html 4. http://unctad.org/meetings/es/Presentation/cstd2016_p24_Jae-HeeChang_ILO_en.pdf. 5. https://opentextbc.ca/teachingindigitalage/ 6. Ho Tu Bao, Nguyen Nhat Quang, Q&A about digital transformation.	- Implementation guidelines: + Make sure personal computers meet learning requirements (Webcam, headphone, browser, MS Office, Vietnamese keyboard) + Advise students on how to buy a personal computer and install necessary software (if students D15 have computers yet) + Introduce course + Introduce assessment method & project - Introduce theory; organize online sessions with video lectures, teaching materials, and test questions posted on LMS - Students collect lecture contents to use as data for the final Project at the end of course	Computers connected to the Internet; online training system

				7. All learning materials of the module		
Practice: 1. Search for and select answers to instructor's navigating questions about industrial revolutions in general, the 4th industrial revolution in particular, and their impacts on studying and working in the future. 2. Search for information about digital competence (competence in Information Technology, media, and digital device operation, etc.) 3. Practice opening a studying account, and study and submit assignments on online training system		1	Be able to open studying accounts and explore all studying materials, and submit sample assignments on online training system	Instructor's navigating questions	Practice steps: 1. Divide class into groups. 2. Search for information related to 5 topics (as specified by instructor). 3. Each group discusses and reaches an agreement about the topics separately. 4. Each group presents its discussion results. 5. Class comments, discusses, and criticizes group results. 6. Instructor concludes class discussion and makes a final decision.	Computers connected to the Internet; online training system
LESSON 2. USING DIGITAL DEVICES AND SOFTWARE	**2**	**8**				
1. Introduce Digital Devices and Software	1	2			Study online with lecture videos, studying materials, and test posted on LMS	- LMS; - Students should have computers and smartphones connected to the Internet
1.1. Digital devices			Be able to present and apply definitions about digital devices to identify and classify them.	Item 11, Clause 4, Information Technology Law 2006		
1.1.1. Definition						
1.1.2. Classification - By size - By purpose of use - By operating system						
1.2. Application software and online platforms						

1.2.1. System software				Appendix No. 01 Circular 09/2013/TT-BTTTT		
- Definition, classification			Be able to differentiate and name commonly used software and its applications in real-life study and work.			
- Operating systems: for servers, workstations/ personal computers, or laptops, etc. (Windows, Linux, MacOS, iOS, Android, etc.)						
- Network operating systems: for computers (Novell Netware, Windows Server, Linux, etc.), for network devices (Router, Switch - EdgeOS, IOS, etc., firewall - FortiOS, DrayOS, etc.).						
- Database management software (SQL Server, mySQL, Oracle, etc.)						
- Embedded software (Firmware)						
- Other network software						
1.2.2. Application software						
- Definition, classification			Differentiate and name common software and its main functions corresponding to each type of application or utility software			
- Commonly used software types:						
+ Office software: MS work, excel, PowerPoint, Google docs... + Entertainment software: MediaPlayer, Spotify, VLC... + Management software: MS Team, MS ToDo, Base Wework, Trello...						

+ Simulation software: CADe-SIMU, EasyEDA, SolidWorks…						
1.2.3. Utility software						
- Differentiate utility and application software						
- Examples of commonly used utility software: Winrar, AntiVirus, Unikey…						
1.2.4. Online platforms						
- Definition, classification			Be able to differentiate online platforms and webapps.	1. https://kynguyencongnghe.com/nen-tang-phan-mem-la-gi-va-no-khac-biet-voi-san-pham-nhu-the-nao/ 2. https://ghichu.vn/blog/nen-tang-dich-vu/ 3. https://funix.edu.vn/chia-se-kien-thuc/nen-tang-duoi-dang-dich-vu-paas/		
- Differentiate online platforms and webapp software						
1.3. Open-source software						
- Definition and copyrights of open-source software			Be able to present the features of	1. https://vi.wikipedia.org/wiki/Ph%E1%BA%A7n_m%E1%BB%81m_ngu%E1%BB%93n_m%E1%		
- Strengths and weaknesses of open-source software						

- Introduction of OpenOffice application			open-source software	BB%9F#Hi%E1%BB%87n_t%E1%BA%A1i 2. https://bizflycloud.vn/tin-tuc/phan-mem-ma-nguon-mo-la-gi-5-phan-mem-ma-nguon-mo-duoc-ua-chuong-nhat-hien-nay-20201028120531765.htm		
2. Use Digital Devices and Software	1	6				
2.1. Manage files and folders on Windows Operating System			Be able to manage files and folders in a logical manner which is also suitable for purpose of use and easy to access.	https://support.microsoft.com/vi-vn/windows/tr%E1%BB%A3-gi%C3%BAp-trong-file-explorer-a2d33543-5242-788d-8994-b0be10ae5bca#WindowsVersion=Windows_11	- Students practice individually with computers in the lab. - Each function must be performed with mouse and menu, and shortcuts.	Practice lab, each student is assigned 1 computer with Internet connection
- How to name files and folders, and arrange folders properly						
- How to use File Explorer to manage files						
2.1.1. Select, copy, and move files and folders						
- Perform with mouse and menu						
- Perform with shortcuts						
2.1.2. Delete and restore files and folders						
- Perform with mouse and menu						
- Perform with shortcuts						
2.1.3. Search for files and folders						
- Perform with mouse and menu						
- Perform with shortcuts						

2.2. Use some utility software						
2.2.1. Software for compressing and decompressing files - Compressed (Zipped) folder (windows) - 7-Zip Software 2.2.2. Anti-virus software - Windows defender - BKAV, Kaspersky…			Be able to install and use the main functions of utility software designed for study and work.	1. Download software https://7zip-vi.updatestar.com/ 2. Instruction https://7zip-vi.updatestar.com/support.html 3. Kaspersky https://www.kaspersky.com.vn/ 4. BKAV https://www.bkav.com.vn/	- Students practice individually with computers in the lab. - Teacher instructs students on how to use the Google Translate function in Chrome Browser to translate the instruction page into Vietnamese.	Practice lab, each student is assigned with 1 computer with Internet connection
2.3. Manage hardware and software with Setting & Control Panel						
2.3.1. Bluetooth and other wireless devices - Install, configure, and connect with Bluetooth - Install, configure, connect with printer through a USB cable, or wired/wireless network 2.3.2. Screen, sound, notification, electric and battery sources - Install, un-install, re-install device drivers, and apps for video and audio cards - Set up and fine-tune notifications and plans on			Be able to manage hardware and software with Setting and Control Panel	https://support.microsoft.com/vi-vn/windows/nh%E1%BA%ADn-tr%E1%BB%A3-gi%C3%BAp-v%E1%BB%81-c%C3%A0i-%C4%91%E1%BA%B7t-pc-8e156e97-9b7e-c874-fdd2-0c3f259daf15	- Students practice individually and in groups on computers and devices. - Teacher instructs students on how to use the Google Translate function in Chrome Browser to translate the instruction page into Vietnamese. - Teacher can select suitable software for implementation. *Assignment: Students save screenshots of their performance of functions	- Practice lab, each student is assigned with 1 computer with Internet connection; - Printer, loudspeaker with Bluetooth, Wi-Fi, and RJ45 connection

electrical and battery use (for laptops)					2.3.1 to 2.3.6 to update on their e-Portfolios.	(10 units for each type).
2.3.3. Appearance and Personalization						
- Customize by theme						
- Color, font, background image						
2.3.4. Uninstall and fine-tune software						
- Un-install and update software with Control Panel						
- Use the un-install function of the software						
- Perform some adjustments: Activate with Windows or not? Create shortcuts on desktops or not? Set up as default or not? Etc.						
2.3.5. Network and Internet						
- Set up wired and wireless networks for computers						
- Use the Internet with web browsers: MS Edge, Google Chrome, etc.						
2.3.6. Privacy and maintenance						
- Secure users' accounts						
- Use firewall to secure computer networks						
- Maintain computers with such tools as Automatic Maintenance and Recovery.						
2.4. Technology ecology						

2.4.1. Definition, classification			- Be able to present and differentiate software ecologies; cite examples for each software ecology. - Be able to synchronize and share data among different devices within the same software ecology	https://www.thuatngumarketing.com/ecosystem-he-sinh-thai/	Introduce theory, and organize online teaching sessions with lecture videos, studying materials, and test posted on LMS	- LMS - Students should have computers and smartphones connected to the Internet
- By field, profession, application: Education, Administration, Business, etc.						
- By platform: Windows, Linux, etc.						
- By brand: Samsung, Apple, Xaomi, etc.						
2.4.2. Major technology ecologies (Microsoft, Google, Android, Apple...)					- Students practice individually and in groups on computers and devices. - Teacher instructs students on how to use the Google Translate function of Chrome Browser to translate the instruction page into Vietnamese.	- Practice lab, each student is assigned with 1 computer with Internet connection.
- Synchronize data: files, contacts, work schedules, etc. in different devices using the same software ecology and account.						
- Share data directly among different devices within the same ecology: MiShare (Xaomi), AirDrop (Apple), QuickShare (Samsung), etc.						
LESSON 3. WORKING IN DIGITAL ENVIRONMENT	**3**	**7**				
1. Basic knowledge about the Internet and Digital Environment	1	1			Introduce theory, and organize online teaching sessions with lecture videos, studying materials, and test posted on LMS	
1.1. Internet			Be able to present the definition, application, values, and	https://vi.wikipedia.org/wiki/Internet		- LMS - Students should have computers and
1.1.1. Overview						
- Services on the Internet						
- Information Organization on the Internet (Domain,						

Webpage, Website, Homepage, URL)			difference of the Internet			smartphones connected to the Internet.
- Web browser						
1.1.2. History of Development						
1.2. Digital Environment			- Distinguish between concepts - Use tools to search and evaluate information - Choose appropriate keywords for effective searches	Ho Tu Bao, Nguyen Huy Dung, Nguyen Nhat Quang (2020). Q&A about Digital Transformation, Publishing House of the Ministry of Information and Communications, Hanoi		- LMS - Students should have computers and smartphones connected to the Internet
1.2.1. Differentiate data, information and knowledge						
1.2.2. Search, evaluate and use information in digital environment						
- Search tools: Google, Bing, Cốc Cốc…						
- Evaluate information: source and reliability of information, pages, reviews, comments, URL…						
- Use the information appropriately and effectively						
1.3. Organize, store and share data in the digital environment (cloud)						
1.3.1. Create Account			Be able to create accounts on cloud platforms, organize storage, manage files and folders logically, suitable for the	https://support.microsoft.com/vi-vn/windows/tr%E1%BB%A3-gi%C3%BAp-trong-file-explorer-a2d33543-5242-788d-8994-b0be10ae5bca#WindowsVersion=Windows_11	- Students practice individually and in groups on computers and devices. - Teacher instructs students on how to use the Google Translate function of Chrome Browser to translate the instruction page into Vietnamese.	- Practice lab, each student is assigned with 1 computer with Internet connection.
1.3.2. Organize and store data						
1.3.3. Share data						

			purpose of use and easy to access.			
2. Major Online Platforms		2				
2.1. Social networks, media			- Access the platform and application (find the link, install the app) - Create and use an account to log in and use basic features of the platform and application	1. Support/help/support page on the Homepage of the platform to use 2. Search/search with keywords: user manual + platform name 3. https://www.youtube.com/watch?v=dqXtFY8j7Uk	Students practice individually on computers	- LMS - Students should have computers and smartphones connected to the Internet
Zalo, Facebook, Google, Instagram						
YouTube, TikTok						
2.2. Online services and applications						
2.2.1. Entertainment (Spotify, Zings, Apple music, Netflix…)						
2.2.2. E-Commerce (Tiki, Shopee, Grab, Amazon, Bestbuy…)						
2.2.3. Administration (Public services, electronic identification …)						
2.2.4. Study and work						
2.2.5. Work management (Base.vn, Fastwork, Trello, Zalo, Google…)						
2.2.6. Meeting (MS Team, Google Meet, Zoom…)						
2.2.7. Collaboration at work (Office365, Google Space)						
3. Major AI Platforms		1				- LMS - Students should have computers
- Question and Answer: ChatGPT, Bard, Cortana, Siri...			- Access to AI platform (find	https://vi.wikipedia.org/wiki/Tr%C3%AD_tu%E1%BB%87_nh%C3%A2n_t%E1%BA%A1o	Students practice individually on computers	

- Study, work: Google Cloud Text-to-Speech, Codex, Jasper Art, Rytr... - Entertainment: Game AI, TikTok, YouTube...			link, install app) - Create and use an account to log in and use basic features of the AI platform and applications			and smartphones connected to the Internet
4. Culture in Cyberspace	1	1	Be able to present and apply correctly and flexibly in real interactions in cyberspace	Decision No. 874/QĐ-BTTTT on the Issuance of Behavior Guidelines for Social Networks	Introduce theory, and organize online teaching sessions with lecture videos, studying materials, and test posted on LMS	- LMS - Students should have computers and smartphones connected to the Internet
4.1. Guidelines for behavior in cyberspace						
4.2. Social ethical standards in cyberspace						
5. Information security and network security	1	2				
5.1. Share and use information safely			- Be able to distinguish between information safety and network security - Be able to present and have a proper attitude about information safety and network security while	1. Network Security Law 2. Cyber Information Safety Law 3. https://antoanthongtin.vn/tan-cong-mang		
5.2. Attacks in cyberspace and preventive measures						
5.3. Assess risks and protect personal, organizational and third-party information.					Students practice individually on computers	- LMS - Students should have computers and smartphones connected to the Internet

			studying and working in cyberspace - Be able to perform basic techniques to ensure information safety.			
TEST 1		**1**	Areas of content that need to be tested: 1. Manage and share files on personal computers (local), and on cloud storage services (cloud). Synchronize files among different devices within the same software ecology. 2. Manage and install devices and software 3. Culture in cyberspace		+ Teacher prepares test questions + Students take the test individually on personal computers	

			4. Register for and exploit online platforms 5. Information safety and cyber security			
LESSON 4. CREATING DIGITAL CONTENT	**6**	**30**				
1. Text Processing (MS Word, WPS - Document) 1.1. Format texts 1.2. Insert into texts 1.3. References 1.4. Mail merge 1.5. Distribute texts	1.5		- Select appropriate tools to create and edit texts as needed	TEACHING MATERIALS FOR INFORMATICS COLLEGE-LEVEL TRAINING PROGRAM (Accompanied by Official Dispatch No. 147/TCGDNN-ĐTCQ signed on 22 January 2020 by the Directorate of Vocational Education and Training)	Introduce theory; organize online teaching sessions with video lectures, studying materials, and test posted on LMS	Computers installed MS Office, WPS Office and must have a sound card and speakers/ head-phones
Practice: create different types of texts 1. Newspaper Articles (Column, Dropcap, WrapText, etc.) 2. Advertisements (Picture, WordArt, SmartArt, WarterMark, etc.) 3. Notices (Paragraph, Tab, Bullet & Numbering, Table) 4. Invitation Letters (Tab, Mail Merge) 5. Resumes (Column, Table, Picture, Symbol, Icon, et.) 6. Permission Letters (Paragraph, Tab, etc.)		8	- Search for information and images on the Internet as required - Use word processing software to create and edit different types of texts as required - Select, save, share and secure information and data		+ Students prepare raw data in advance + Teacher instructs students how to create and format texts step by step + Students practice individually on personal computers to create texts as required	

2. Spreadsheet Processing 2.1. Enter Data 2.2. Format Data 2.3. Process data 2.4. Draw charts 2.5. Distribute spreadsheets	2		- Select appropriate tools and functions to create spreadsheets as needed		Introduce theory; organize online teaching sessions with video lectures, studying materials, and test posted on LMS	
Practice: create different types of spreadsheets 1. Planning, 2. Cost Estimation, 3. Employee Payrolls, 4. Charts & Graphs, etc.		14	- Use spreadsheet software to create and edit data according to sample - Use basic functions and data processing functions to create spreadsheets as needed in real-life situations - Select, save, share and secure information and data.		+ Students prepare raw materials in advance + Students enter data for spreadsheets before class + Teacher instructs students how to use functions to process data + Students practice on personal computers to create spreadsheets as required	
3. Presentation Processing (MS PowerPoint, WPS - Presentation) 3.1. Notes on designing presentations 3.2. Basic steps in creating	1		- Select appropriate tools to design presentations as needed		Introduce theory; organize online teaching sessions with video lectures, studying materials, and test posted on LMS	

presentations 3.3. Effects for presentations 3.4. Distribute presentations						
Practice: 1. Create 1 presentation to introduce oneself (profile) 2. Create 1 presentation to introduce digital competence 3. Create 1 presentation to introduce digital devices and software, etc.		4	- Be able to search for required data on the Internet, and verify data sources/copyrights prior to use. - Use presentation software to create presentations as required. - Select, save, share and secure information and data		+ Students prepare in advance the content they want to present + Teacher instructs students how to use presentation software to create presentations + Students practice on personal computers to create presentations + Students save presentations for the assignment at the end of course	
4. Create images, audio and video 4.1. Create images 4.2. Create audio 4.3. Create video	0.5		Distinguish file formats between image, audio and video.		Organize online teaching sessions with video lectures, studying materials, and test posted on LMS	

Practice: 1. Draw an illustration or advertisement, take a screenshot of the computer's working screen; save file; send files or insert files into Word/PowerPoint/... 2. Create a voice recording file using a computer application; save file; send file (content: self-introduction/ presentation on digital competencies/... to attach to the PowerPoint file already made) 3. Create image and sound recording files using computer applications (content: related to self-introduction/ lesson contents/...) ..... ***Notes:*** - Depending on the conditions, choose applications and software for instructions - Some applications available on computers: MS. Paint/MS. Word/MS. PowerPoint; Sound Recorder; Camera; ... - If possible, practice on the phone	1	4	- Create vector and bitmap images; save in the correct format and send to others - Create simple audio files, save in the correct format and send to others - Create simple video files, save in the correct format and send to others	https://support.microsoft.com/en-us/windows/sound-recorder-app-for-windows-faq-5c208478-2141-bd07-fe1d-d6d1356c1d56 https://support.microsoft.com/en-us/windows/how-to-use-the-camera-app-ea40b69f-be6a-840e-9c8c-1fd6eea97c22	+ Students prepare in advance the ideas for products they want to create + Teachers guide students to use applications to do exercises + Students practice on personal computers to create products as required + Students save the products for assignment	

- This section can be taught before the section on Presentation Processing to inherit data						
TEST 2		**1**	Test students on how to create spreadsheets according to a practical need, including: - Enter data - Use formulas and functions to calculate, search for, synthesize, and extract data - Create charts with the processed data - Format and decorate spreadsheets		+ Teacher prepares test questions + Students take the test individually on personal computers	

LESSON 5. APPLYING DIGITAL COMPETENCE AT WORK	**3**	**12**				
1. Manage Work with Calendar **2. Create and Manage Online Meetings**	1		- Name the different uses of Google Calendar - Select appropriate online meeting apps for real-life situations.	https://workspace.google.com/intl/vi/lp/business/?utm_source=google&utm_medium=cpc&utm_campaign=1605214-Workspace-APAC-VN-vi-BKWS-PHR-HV&utm_content=text-ad-none-none-DEV_c-CRE_639588699050-ADGP_Hybrid%20%7C%20BKWS%20-%20PHR%20%7C%20Txt_G%20Suite-KWID_43700074424303497-kwd-296636275351&userloc_1028581-network_g&utm_term=KW_gsuite&gad=1&gclid=Cj0KCQjwmICoBhDxARIsABXkXlL0UJUj-U3GFSsv2YwVumsTg-WyrKZ7GWnK_HHPCI3_izOxEIktGFQaAuRMEALw_wcB&gclsrc=aw.ds	Introduce theory; organize online teaching sessions with video lectures, studying materials, and test posted on LMS	
Practice: 1. Manage work with Calendar: create work reminders, events, and meetings as planned 2. Create and manage online meetings with 1 commonly		1	- Use online apps to organize, store and share documents for work.	https://support.google.com/calendar/answer/37095?hl=vi https://support.google.com/meet/answer/9303069?hl=vi&co=GENIE.Platform%3DDesktop	+ Students are informed of assignment requirements in advance + Teacher instructs students how to carry out assignment	

used app suitable to real-life conditions (Zoom/ Google Meet/ MS Teams/etc.)			- Use apps to organize and manage work online according to behavioral and moral standards.		+ Students practice on Internet-connected computers	
3. Collaborate to Create Digital Content (Microsoft Office 365/Google G- Suite/WPS Office/ Canva)	1		- List some apps for collaborating to create office documents - Select suitable apps to collaborate to create documents in real-life situations.	https://support.google.com/docs/?hl=en#topic=1382883	Introduce theory; organize online teaching sessions with video lectures, studying materials, and test posted on LMS	
Practice: Collaborate to create a presentation on working in digital environments or digital competence		5	- Use apps to collaborate online according behavioral and moral standards.		+ Students are informed of, and prepare for assignment requirements in advance + Teacher instructs students on how to carry out assignment + Students practice collaborating on Internet-connected computers	

4. Create Personal Data Pages (Google Site/Adobe/Padlet/ Bookcreator)	1		- Be able to present the uses and meanings of personal data pages - Select suitable apps to create personal data pages	https://support.google.com/sites/?hl=en#topic=7184580 https://portfolio.adobe.com/ https://padlet.com/ https://bookcreator.com/	Introduce theory; organize online teaching sessions with video lectures, studying materials, and test posted on LMS	
Practice: Create personal data pages with 1 suitable app (hint: Blog, Google Site, Adobe, Padlet, Bookcreator, etc.)		6	- Be able to search for required data on the Internet, and verify data sources/copyrights prior to use. - Use online apps to create personal data pages according to copyright regulations. - Select, store, share and secure information and data.		+ Students search for some personal data page samples + Students are informed of and prepare for assignment requirements in advance + Teacher instructs students how to carry out assignment + Students practice on Internet-connected computers.	

Final Exam/Instructions and Assessment of Assignment						

PART II

MODULE: DIGITAL LITERACY - INTERMEDIATE LEVEL

PART II. MODULE: DIGITAL LITERACY - INTERMEDIATE LEVEL

SECTION A: SYLLABUS OF MODULE: DIGITAL LITERACY - INTERMEDIATE LEVEL

Name of module: Digital literacy

Code of module:

Duration: 45 hours (theory: 08 hours; practice, discussions & assignments: 36 hours; exams: 1 hour).

I. Module Position and Description

1. Position

Digital literacy is a module in the general education category of the intermediate study program.

2. Description

The module equips students with basic digital competence as well as use of platforms, applications, software and digital devices that can be applied in learning and life.

II. Objectives of Module

After completing this course, students will achieve basic digital competence, in particular:

1. Knowledge

- Present and explicate basic knowledge about internet, digital devices, software, platforms, content creation, and use of applications in digital environments;

- Understand security, safety and behavioral culture issues while participating in digital environments

2. Skills

- Be able to use computers and digital devices, and exploit application software in digital devices to meet requirements for studying and working safely in the digital environment;

- Be able to use online platforms and software of word processing, spreadsheet, presentation; and utilize them in study and future work;

- Be able to share and exchange digital data and information in study and work, applied in implementing electronic public services and e-commerce;

- Be able to follow rules about culture and information safety and privacy; follow rules about labor safety and environment protection while using computers, digital devices and information technology applications

3. Autonomy and Responsibility

- Be able to recognize the importance of and obey relevant laws, and make responsible use of computers, digital devices, information technology and communications in everyday life, study, and work;

- Be able to comply with regulations on data protection of individuals, organizations and third parties in the digital environment;

- Be able to work independently or with teams while applying basic digital competence in studying, working and other activities.

III. Module Content

1. Content Overview and Structure

Seq.	Content	Time (hour)			
		Total	Theory (T)	Practice, discussions, assignments (P)	Tests
1	Lesson 1: Introduction to digital competence	2	1	1	
2	Lesson 2: Using digital devices and software	5	1	4	
3	Lesson 3: Working in digital environments	7	2	5	
4	Lesson 4: Creating digital content	30	4	26	
5	Test	1			1
	Total	**45**	**8**	**36**	**1**

2. Content Details

LESSON 1. INTRODUCTION TO DIGITAL COMPETENCE

Duration: 2h (T: 01h, P: 01h)

1. Objectives

After completing this lesson, students will be able to:

- Present basic knowledge about the 4th industrial revolution, and its impact on human life. Have a general grasp of digital competence and its role in studying and working;

- Search, collect information, discuss and explain the context of digital transformation and the demand for digitally skilled human resources; understand the meaning and role of digital citizens at school and work today

2. Content

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
	Introduction to digital competence	**1**	**1**	
1	**Introduction to module Digital literacy**			
1.1	Module learning and assessment methods			
1.2	Learning platforms and materials			
2	**History of the Development of Industrial Revolutions**			
2.1	Mechanization with hydraulic and steam machines (1st Industrial Revolution)			
2.3	Electronic engines and assembly lines (2nd Industrial Revolution)			
2.4	Computers and automation (3rd Industrial Revolution)			
2.5	Systems linking the physical, digital and biological worlds (4th Industrial Revolution)			
3	**Impact of the fourth industrial revolution on several areas**			
3.1	Labor and employment			
3.2	Health and education			
3.3	Industry and agriculture			
4	**Overview of Digital Competence**			
4.1	Digital competence			
4.2	Digital citizens			
4.3	Digital transformation and the demand for digitally skilled human resources			

LESSON 2. USING DIGITAL DEVICES AND SOFTWARE

Duration: 5h (T: 01h, P: 04h)

1. Objectives

After completing this lesson, students will be able to:

- Present basic knowledge about computers and digital devices;

- Use available functions of Windows operating systems to fine-tune and personalize devices; use cloud services;

- Access and use digital devices and software effectively

2. Content

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
1	**Introduce Digital Devices and Software**	**1**	**1**	
1.1	Digital devices			
	Definition			
	Classification			
1.2	Application software and online platforms			
	System software			
	Application software			
	Utility software			
	Online platforms			
2	**Use Digital Devices and Software**		**3**	
2.1	Manage files and folders on Windows Operating System			
2.2	Use some utility software			
	Software for compressing and decompressing files			
	Anti-virus software			
2.3	Manage hardware and software with Setting & Control Panel			
	Uninstall and fine-tune software			
	Network and Internet			
	Privacy and maintenance			

LESSON 3. WORKING IN DIGITAL ENVIRONMENT

Duration: 7h (T: 02h, P: 05h)

1. Objectives

After completing this lesson, students will be able to:

- Present basic knowledge about the Internet and digital environments;

- Use basic software and online platforms in digital environments for study, entertainment and work at basic level;

- Behave and communicate properly and responsibly while sharing and using information and prevent risks in digital environments.

2. Content

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
1	**Basic knowledge about the Internet and Digital Environment**	**1**	**2**	
1.1	Internet			
	Overview			
	History of Development			
1.2	Digital Environment			
	Search information			
	Evaluate and use information in digital environment			
1.3	Organize, store and share data in the digital environment (cloud)			
	Create Account			
	Organize and store data			
	Share data			
2	**Major Online Platforms**		**2**	
2.1	Social networks, media			
2.2	Online services and applications			
	Study and work			
	Meeting			
	Collaboration at work			
3	**Culture in Cyberspace**	**0.5**	**0.5**	
3.1	Guidelines for behavior in cyberspace			
3.2	Social ethical standards in cyberspace			
4	**Information security and network security**	**0.5**	**0.5**	
4.1	Share and use information safely			
4.2	Attacks in cyberspace and preventive measures			

LESSON 4. CREATE DIGITAL CONTENT

Duration: 30h (T: 04h, P: 26h)

1. Objectives

After completing this lesson, students will be able to:

- Explain the uses of software and applications for creating digital content;

- Use software and applications to create and edit content (texts, spreadsheets, presentations, personal data pages with such data as texts, images, sound, videos, etc.).

2. Content

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
1	**Text Processing**	**1**	**8**	
1.1	Format texts			
	Format pages (Page Setup, Page Background, Style Set)			
	Format paragraphs (Paragraph, Styles, Column, Tab, Drop Cap)			
1.2	Insert into texts			
	Table			
	Illustrations			
	Links			
	Comments			
	Header & Footer			
	Text			
	Symbols			
1.3	References			
	Table of Contents			
	Create note			
1.4	Mail merge			
1.5	Distribute texts			
	Save texts with different file formats			
	Save texts on the world wide web			
	Export files			
	Print			

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
2	**Spreadsheet Processing**	**2**	**14**	
2.1	Enter Data			
	Different types of data			
	Enter and edit data			
2.2	Format Data			
	Format data cells			
	Format data areas			
	Format data sheets			
2.3	Process data			
	Use mathematical statements (definition, creating simple arithmetic expressions, common mistakes)			
	Use mathematical functions (definition, syntax, how to enter functions; comparison operators; basic functions; conditioning functions; logical functions; date and month functions; chain functions; search functions; conditional functions)			
	Sort and filter data			
2.4	Draw charts			
	Types of charts			
	Create and correct charts			
2.5	Distribute spreadsheets			
	Save spreadsheets as different file formats			
	Secure data, and set passwords to protect spreadsheets			
	Save spreadsheets on the world wide web			
	Lay out spreadsheets for printing			
	Print spreadsheets			
3	**Presentation Processing**	**1**	**4**	
3.1	Notes on designing presentations			
	Factors affecting presentations			
	Use available presentation templates			
3.2	Basic steps in creating presentations			

Seq.	Content	Time (hour)		
		Theory	Practice, discussions, assignments	Tests
	Create slides			
	Create texts and formats			
	Insert into slides (Pictures, Shape, WordArt, Textbox, Table, Chart, SmartArt, Audio, Video, Link)			
3.3	Effects for presentations			
	Animations			
	Transitions			
	Slide Show			
3.4	Distribute presentations			
	Save presentations as different file formats			
	Save presentations on cloud storage services			
	Print presentations			

Test: 1 hour

Final exam

IV. Module Implementation Conditions

1. Integrated Classroom

- The integrated classroom needs to have an Internet connection and is equipped with adequate lighting and air conditioning.

- Desks, chairs and computers in quantities that meet standards for practice classrooms;

- Instructor’s desk and chair, board and board marker.

2. Equipment

- Computers installed with Windows Operating System, Microsoft Office (Microsoft Word, Microsoft Excel, Microsoft PowerPoint) and utility software.

- Projector, printer, Wi-Fi, network cable (RJ45); loudspeaker.

- Digital devices in media and telecommunications (if available).

3. Teaching & Learning Materials

- Textbooks, syllabus, slides

- Program of Module Digital literacy

- Reference Materials and Implementation Guidelines

4. Other Conditions

Vocational education institutions are encouraged to equip classrooms and other conditions to be able to implement blended learning, including:

- Learning Management System - LMS

- A practice room or equipment to produce clip/video/ audio content…

- A computer for editing videos and helping to produce packaged lessons: the computer has adequate RAM capacity for editing videos and installing such software as Adobe Premiere, Adobe Audition, Adobe After Effect and Articulate Storyline, etc.

V. Assessment Contents and Methods

The assessment of students' learning results is carried out in accordance with Circular 04/2022/TT-BLĐTBXH approved on 30/3/2022 by the Minister of Labor, War Invalids & Social Affairs on the organization of the training of intermediate and college curricula according to a year-based, or module or credit-based format.

1. Contents

- Knowledge: assessed in the form of written tests, multiple choice tests on the LMS system or integrated into periodic tests with integrated test questions according to the following contents:

+ The meaning and role of digital competencies in learning and working;

+ Classification and methods of using some digital devices and software;

+ Rules of behavior in the digital environment and distinguishing between online platforms;

+ Knowledge and process of creating digital content related to creating digital content.

- Skills: assessed through periodic or regular tests directly or indirectly (on the LMS system) through the implementation sequence and products required from teacher:

+ Process and skills in using digital devices;

+ Working in digital environment;

+ Create digital content and skills to apply digital content for career orientation

- Autonomy and responsibility: assessed by the observation method with a checklist, meeting the requirements:

+ Ensure study hours;

+ Be self-aware, highly disciplined, have a spirit of teamwork, and be responsible for the tasks assigned by teacher;

+ Careful, meticulous and accurate; proactive and creative in assigned work.

2. Methods

- Regular assessments: performed directly or indirectly (on the LMS system) through multiple-choice questions on related knowledge or skills assessments at appropriate time. The minimum number of regular tests is 02.

- Periodic assessments: 01 tests are conducted using integrated tests (knowledge and ability to perfect products) with evaluation criteria. The total score of the exam can be on a 10-point scale or a 100-point scale, which is an integration of both theoretical content and skills. The time for one exam is 60 minutes.

- Final exam: an integrated test (knowledge and ability to perfect products), minimum exam time of 60 minutes (not included in the 45-hour training program).

VI. Implementation Guidelines

1. Scope of Application

The Digital literacy module is designed for intermediate-level students and consists of 45 hours (theory, practice and test).

2. Instructions on Teaching and Learning Methods

- For teachers:

+ Teachers need to base on the content of each lesson and training program instructions to fully prepare the necessary conditions to ensure teaching quality and at the same time be responsible for guiding the self-study process and self-preparation of students.

+ Refer to the Module Implementation Guide and reference documents to prepare detailed outlines, lesson plans, tests, assessments and instructions for implementing Assignment/e-Portfolio.

+ Prepare presentation slides for classroom sessions. If blended learning is allowed, record online lectures and guide students to study before going to class.

+ Inform students from the first session about how to deploy the module, the module's objectives, content, and testing/exam/evaluation methods.

- For students:

+ Ensure the number of study hours according to current regulations.

+ Prepare all lessons and self-study online (following the instructor's instructions, if any) before class.

+ Actively participate in group discussions, speeches, and presentations to expand knowledge and practice skills in class with the guidance of instructors.

+ Some contents can be practiced at businesses with adequate equipment and practice platforms.

3. Key Points

- The Digital literacy module is built with the desire to deploy active learning, project-based learning and blended learning to improve efficiency. However, depending on the physical conditions and instructors, the school will decide the most appropriate way to implement the module.

- The school can evaluate and select appropriate contents of the Digital literacy module to teach and evaluate students according to the content of section V.

- Teachers use appropriate time to introduce contents and implementation methods of the digital literacy module.

4. References

[1] Decision No. 749/QD-TTg dated June 3, 2020 of the Prime Minister approving *"National Digital Transformation Program to 2025, with a Vision to 2030".*

[2] Decision No. 2222/QD-TTg dated December 30, 2021 of the Prime Minister on the approval of *the Digital Transformation Program in Vocational Education for 2021-2025, with a Vision to 2030*.

[3] General Directorate of Vocational Training, 2020, *Teaching and Learning Materials for Informatics (College Study Program),* Ministry of Labor, War Invalids & Social Affairs, Construction Publishing House & Labor and Social Affairs Publishing House

[4] European Commission, 2022, *DigComp 2.2 - The Digital Competence Framework for Citizens,* Joint Research Center.

[5] UNESCO, 2018, *A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2.*

[6] Ho Tu Bao - Nguyen Nhat Quang, 2022, *How to digitally transform*, Information and Communications Publishing House.

[7] Ho Tu Bao - Nguyen Nhat Quang, 2023, *Q&A about Digital Transformation*, Information and Communications Publishing House.

[8] Ministry of Information and Communications, 2021, *Digital Transformation Handbook*, Information and Communications Publishing House.

[9] Bernard Marr; Translator: Pham Duy Trung, 2023, *Tech Trends in Practice: The 25 Technologies that are Driving the 4th Industrial Revolution,* 1st Edition, Information and Communications Publishing House.

5. Notes and Explanations

Module Digital literacy is developed for intermediate - level students in the TVET. The course curriculum is designed according to the international digital competence frameworks established by organizations like UNESCO and the European Commission. Course researchers and developers hope to enable students to achieve learning outcomes that approach the standards set out by the Digital Transformation Project approved by the Prime Minister according to Decision No. 2222/QĐ-TTg on the Digital Transformation Program in Vocational Education for 2021 - 2025, with a Vision to 2030

SECTION B: IMPLEMENTATION GUIDELINES OF MODULE DIGITAL LITERACY - INTERMEDIATE LEVEL

CONTENT	THEORY (hours)	PRACTICE (hours)	OBJECTIVES	MATERIALS	TEACHING AND LEARNING ACTIVITIES	EQUIPMENT
LESSON 1. INTRODUCTION TO DIGITAL COMPETENCE	**1**	**1**				
1. Introduction to module Digital literacy 2. History of the Development of Industrial Revolutions 3. Impact of the fourth industrial revolution on several areas 4. Overview of Digital Competence	1		Understand and present an overview of the concept and impact of the 4th industrial revolution and digital transformation on learning and employment.	1. http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf. 2. https://slejournal.springeropen.com/track/pdf/10.1186/s40561-019-0089-y.pdf 3. https://home.kpmg/xx/en/home/industries/government-public-sector/education/the-future-of-higher-education-in-a-disruptive-world.html 4. http://unctad.org/meetings/es/Presentation/cstd2016_p24_Jae-HeeChang_ILO_en.pdf. 5. https://opentextbc.ca/teachinginadigitalage/	- Implementation guidelines: + Make sure personal computers meet learning requirements (Webcam, headphone, browser, MS Office, Vietnamese keyboard) + Advise students on how to buy a personal computer and install necessary software (if students D15 have computers yet) + Introduce course + Introduce assessment method & project - Introduce theory; organize online sessions with video lectures, teaching materials, and test questions posted on LMS - Students collect lecture contents to use as data for the final Project at the end of course	Computers connected to the Internet; online training system

				6. Ho Tu Bao, Nguyen Nhat Quang, Q&A about digital transformation. 7. All learning materials of the module		
Practice: 1. Search for and select answers to instructor's navigating questions about industrial revolutions in general, the 4th industrial revolution in particular, and their impacts on studying and working in the future. 2. Search for information about digital competence (competence in Information Technology, media, and digital device operation, etc.) 3. Practice opening a studying account, and study and submit assignments on online training system		1	Be able to open studying accounts and explore all studying materials, and submit sample assignments on online training system	Instructor's navigating questions	Practice steps: 1. Divide class into groups. 2. Search for information related to 5 topics (as specified by instructor). 3. Each group discusses and reaches an agreement about the topics separately. 4. Each group presents its discussion results. 5. Class comments, discusses, and criticizes group results. 6. Instructor concludes class discussion and makes a final decision.	Computers connected to the Internet; online training system
LESSON 2. USING DIGITAL DEVICES AND SOFTWARE	**1**	**4**				
1. Introduce Digital Devices and Software	1	1			Study online with lecture videos, studying materials, and test posted on LMS	- LMS; - Students should have computers and smartphones connected to the Internet
1.1. Digital devices			Be able to present and apply definitions about digital devices to identify and classify them.			
1.1.1. Definition				Item 11, Clause 4, Information Technology Law 2006		
1.1.2. Classification - By size - By purpose of use - By operating system						

1.2. Application software and online platforms						
1.2.1. System software				Appendix No. 01 Circular 09/2013/TT-BTTTT		
- Definition, classification			Be able to differentiate and name commonly used software and its applications in real-life study and work.			
- Operating systems: for servers, workstations/ personal computers, or laptops, etc. (Windows, Linux, MacOS, iOS, Android, etc.)						
- Network operating systems: for computers (Novell Netware, Windows Server, Linux, etc.), for network devices (Router, Switch - EdgeOS, IOS, etc., firewall - FortiOS, DrayOS, etc.).						
- Database management software (SQL Server, mySQL, Oracle, etc.)						
- Embedded software (Firmware)						
- Other network software						
1.2.2. Application software						
- Definition, classification			Differentiate and name common software and its main functions corresponding to each type of application or utility software			
- Commonly used software types:						
+ Office software: MS work, excel, PowerPoint, Google docs... + Entertainment software: MediaPlayer, Spotify, VLC... + Management software: MS Team, MS ToDo, Base Wework, Trello... + Simulation software: CADe-SIMU, EasyEDA, SolidWorks…						
1.2.3. Utility software						

- Differentiate utility and application software						
- Examples of commonly used utility software: Winrar, AntiVirus, Unikey…						
1.2.4. Online platforms						
- Definition, classification			Be able to differentiate between online platforms and web apps.	1. https://kynguyencongnghe.com/nen-tang-phan-mem-la-gi-va-no-khac-biet-voi-san-pham-nhu-the-nao/ 2. https://ghichu.vn/blog/nen-tang-dich-vu/ 3. https://funix.edu.vn/chia-se-kien-thuc/nen-tang-duoi-dang-dich-vu-paas/		
- Differentiate online platforms and webapp software						
2. Use Digital Devices and Software		3				
2.1. Manage files and folders on Windows Operating System			Be able to manage files and folders in a logical manner which is also suitable for purpose of use and easy to access.	https://support.microsoft.com/vi-vn/windows/tr%E1%BB%A3-gi%C3%BAp-trong-file-explorer-a2d33543-5242-788d-8994-b0be10ae5bca#WindowsVersion=Windows_11	- Students practice individually with computers in the lab. - Each function needs to be performed with both mouse and menu, and shortcuts.	Practice lab, each student is assigned 1 computer with Internet connection
- How to name files and folders, and arrange folders properly						
- How to use File Explorer to manage files						
2.1.1. Select, copy, and move files and folders						
- Perform with mouse and menu						
- Perform with shortcuts						
2.1.2. Delete and restore files and folders						

- Perform with mouse and menu						
- Perform with shortcuts						
2.1.3. Search for files and folders						
- Perform with mouse and menu						
- Perform with shortcuts						
2.2. Use some utility software						
2.2.1. Software for compressing and decompressing files			Be able to install and use the main functions of utility software designed for study and work.	1. Download software https://7zip-vi.updatestar.com/ 2. Instruction ttps://7zip-vi.updatestar.com/support.html 3. Kaspersky https://www.kaspersky.com.vn/ 4. BKAV ttps://www.bkav.com.vn/	- Students practice individually with computers in the lab. - Teacher instructs students on how to use the Google Translate function in Chrome Browser to translate the instruction page into Vietnamese.	Practice lab, each student is assigned 1 computer with Internet connection
- Compressed (Zipped) folder (windows)						
- 7-Zip Software						
2.2.2. Anti-virus software						
- Windows defender						
- BKAV, Kaspersky…						
2.3. Manage hardware and software with Setting & Control Panel						
2.3.1. Uninstall and fine-tune software			Be able to manage hardware and software with Setting and Control Panel	https://support.microsoft.com/vi-vn/windows/nh%E1%BA%ADn-tr%E1%BB%A3-gi%C3%BAp-v%E1%BB%81-c%C3%A0i-%C4%91%E1%BA%B7t-pc-8e156e97-9b7e-c874-fdd2-0c3f259daf15	- Students practice individually and in groups on computers and devices. - Teacher instructs students on how to use the Google Translate function in Chrome Browser to translate the instruction page into Vietnamese. - Teacher can select suitable software for implementation.	- Practice lab, each student is assigned with 1 computer with Internet connection; - Printer, loudspeaker with Bluetooth, Wi-Fi, and RJ45
- Install, configure, and connect with Bluetooth						
- Install, configure, connect with printer through a USB cable, or wired/wireless network						
- Perform some adjustments: Activate with Windows or not? Create shortcuts on desktops or not? Set up as default or not? Etc.						
2.3.2. Network and Internet						

- Set up wired and wireless networks for computers						connection (10 units for each type).
- Use the Internet with web browsers: MS Edge, Google Chrome, etc.						
2.3.3. Privacy and maintenance						
- Secure users' accounts						
- Use firewall to secure computer networks						
- Maintain computers with such tools as Automatic Maintenance and Recovery.						
LESSON 3. WORKING IN DIGITAL ENVIRONMENT	**2**	**5**				
1. Basic knowledge about the Internet and Digital Environment	1	2				
1.1. Internet			Be able to present the definition, application, values, and difference of the Internet	https://vi.wikipedia.org/wiki/Internet	Introduce theory, and organize online teaching sessions with lecture videos, studying materials, and test posted on LMS	- LMS - Students should have computers and smartphones connected to the Internet.
1.1.1. Overview						
- Services on the Internet						
- Information Organization on the Internet (Domain, Webpage, Website, Homepage, URL)						
- Web browser						
1.1.2. History of Development						
1.2. Digital Environment			- Use tools to search and evaluate information - Choose appropriate	Ho Tu Bao, Nguyen Huy Dung, Nguyen Nhat Quang (2020). Q&A about Digital Transformation, Publishing House of the		- LMS - Students should have computers and smartphones
1.2.1. Search information						
Search tools: Google, Bing, Cốc Cốc…						
1.2.2. Evaluate and use information						

- Evaluate information: source and reliability of information, pages, reviews, comments, URL… - Use the information appropriately and effectively			keywords for effective searches	Ministry of Information and Communications, Hanoi		connected to the Internet.
1.3. Organize, store and share data in the digital environment (cloud)						
1.3.1. Create Account			Be able to create accounts on cloud platforms, organize storage, manage files and folders logically, suitable for the purpose of use and easy to access.	https://support.microsoft.com/vi-vn/windows/tr%E1%BB%A3-gi%C3%BAp-trong-file-explorer-a2d33543-5242-788d-8994-b0be10ae5bca#WindowsVersion=Windows_11	- Students practice individually and in groups on computers and devices. - Teacher instructs students on how to use the Google Translate function of Chrome Browser to translate the instruction page into Vietnamese.	- Practice lab, each student is assigned with 1 computer with Internet connection.
1.3.2. Organize and store data						
1.3.3. Share data						
2. Major Online Platforms		2	- Select and use the basic functions of the introduced online platforms. - Apply online platforms in learning and working	1. Support/help/support page on the Homepage of the platform to use 2. Search/search with keywords: user manual + platform name 3. https://www.youtube.com/watch?v=dqXtFY8j7Uk	- Students practice individually on computers	- LMS - Students should have computers and smartphones connected to the Internet
2.1. Social networks, media						
Zalo, Facebook, Google, Instagram						
YouTube, TikTok						
2.2. Online services and applications						
2.2.1. Study and work						
2.2.2. Meeting (MS Team, Google Meet, Zoom…)						

2.2.3. Collaboration at work (Office365, Google Space)						
3. Culture in Cyberspace	0.5	0.5	Be able to present and apply correctly and flexibly in real interactions in cyberspace	Decision No. 874/QĐ-BTTTT on the Issuance of Behavior Guidelines for Social Networks	Introduce theory, and organize online teaching sessions with lecture videos, studying materials, and test posted on LMS	
3.1. Guidelines for behavior in cyberspace						- LMS - Students should have computers and smartphones connected to the Internet
3.2. Social ethical standards in cyberspace						
4. Information security and network security	0.5	0.5				
4.1. Share and use information safely			- Be able to distinguish between information safety and network security - Be able to present and have a proper attitude about information safety and network security while studying and working in cyberspace - Be able to perform basic techniques to ensure	1. Network Security Law 2. Cyber Information Safety Law 3. https://antoanthongtin.vn/tan-cong-mang		
4.2. Attacks in cyberspace and preventive measures						

			information safety.			
LESSON 4. CREATING DIGITAL CONTENT	**4**	**26**				
1. Text Processing (MS Word, WPS - Document) 1.1. Format texts 1.2. Insert into texts 1.3. References 1.4. Mail merge 1.5. Distribute texts	1		- Select appropriate tools to create and edit texts as needed	TEACHING MATERIALS FOR INFORMATICS COLLEGE-LEVEL TRAINING PROGRAM (Accompanied by Official Dispatch No. 147/TCGDNN-ĐTCQ signed on 22 January 2020 by the Directorate of Vocational Education and Training)	Introduce theory; organize online teaching sessions with video lectures, studying materials, and test posted on LMS	Computers installed MS Office, WPS Office
Practice: create different types of texts 1. Newspaper Articles (Column, Dropcap, WrapText, etc.) 2. Advertisements (Picture, WordArt, SmartArt, WarterMark, etc.) 3. Notices (Paragraph, Tab, Bullet & Numbering, Table) 4. Invitation Letters (Tab, Mail Merge) 5. Resumes (Column, Table, Picture, Symbol, Icon, et.) 6. Permission Letters (Paragraph, Tab, etc.)		8	- Search for information and images on the Internet as required - Use word processing software to create and edit different types of texts as required - Select, save, share and secure		+ Students prepare raw data in advance + Teacher instructs students how to create and format texts step by step + Students practice individually on personal computers to create texts as required	

			information and data			
2. Spreadsheet Processing 2.1. Enter Data 2.2. Format Data 2.3. Process data 2.4. Draw charts 2.5. Distribute spreadsheets	2		- Select appropriate tools and functions to create spreadsheets as needed		Introduce theory; organize online teaching sessions with video lectures, studying materials, and test posted on LMS	
Practice: create different types of spreadsheets 1. Planning, 2. Cost Estimation, 3. Employee Payrolls, 4. Charts & Graphs, etc.		14	- Use spreadsheet software to create and edit data according to sample - Use basic functions and data processing functions to create spreadsheets as needed in real-life situations - Select, save, share and secure information and data.		+ Students prepare raw materials in advance + Students enter data for spreadsheets before class + Teacher instructs students how to use functions to process data + Students practice on personal computers to create spreadsheets as required	

3. Presentation Processing (MS PowerPoint, WPS - Presentation) 3.1. Notes on designing presentations 3.2. Basic steps in creating presentations 3.3. Effects for presentations 3.4. Distribute presentations	1		- Select appropriate tools to design presentations as needed		Introduce theory; organize online teaching sessions with video lectures, studying materials, and test posted on LMS	
Practice: 1. Create 1 presentation to introduce oneself (profile) 2. Create 1 presentation to introduce digital competence 3. Create 1 presentation to introduce digital devices and software, etc.		4	- Be able to search for required data on the Internet and verify data sources/copyrights prior to use. - Use presentation software to create presentations as required. - Select, save, share and secure information and data		+ Students prepare in advance the content they want to present + Teacher instructs students how to use presentation software to create presentations + Students practice on personal computers to create presentations + Students save presentations for the assignment at the end of course	
TEST		**1**	Test students on how to create spreadsheets according to a		+ Teacher prepares test questions + Students take the test individually on personal computers	

			practical need, including: - Enter data - Use formulas and functions to calculate, search for, synthesize, and extract data - Create charts with the processed data - Format and decorate spreadsheets			
Final Exam						

Module Digital Literacy was designed and developed within the framework of the Program Reform of Technical Vocational Education and Training in Vietnam, German Corporation for International Cooperation GmbH (GIZ), authorized by the German Federal Ministry of Economic Cooperation and Development (BMZ) in collaboration with Department of Formal Training under the Vietnam Directorate of Vocational Education and Training.